SOUTHERN ILLINOIS UNIVERSITY CARBONDALE

ASSOCIATE DEGREE PROGRAM

STUDENT HANDBOOK

OF

GENERAL POLICIES FOR

RADIOGRAPHY CLINICAL EDUCATION

School of Health Sciences

Revised August 2025

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CHAPTER 1--INTRODUCTION AND PROGRAM GOALS

WELCOME

Welcome to the Radiography component (aka Radiography Program) within the Radiologic Sciences Program (RADS). As a student enrolled in the Bachelor of Sciences (B.S.) degree Radiologic Sciences Program, you are entering a paramedical career program that is interesting, diversified, and demanding. The Radiologic Sciences Program is designed to allow the student to build upon their Radiography education/training experience and enter into one of the advanced specialty areas (e.g., Magnetic Resonance Imaging and Computed Tomography (MRI/CT), Radiology Management & Education, or Radiation Therapy) see Figure 1. The concept within this RADS Program is to provide a professional career ladder for a student that includes Radiography and an advanced specialty area while completing a B.S. degree.

The Radiography component is designed to help you develop the knowledge and skills required to perform in medical radiography as a radiographer. Many subtle qualities besides knowledge and skills are required to complete this component successfully.

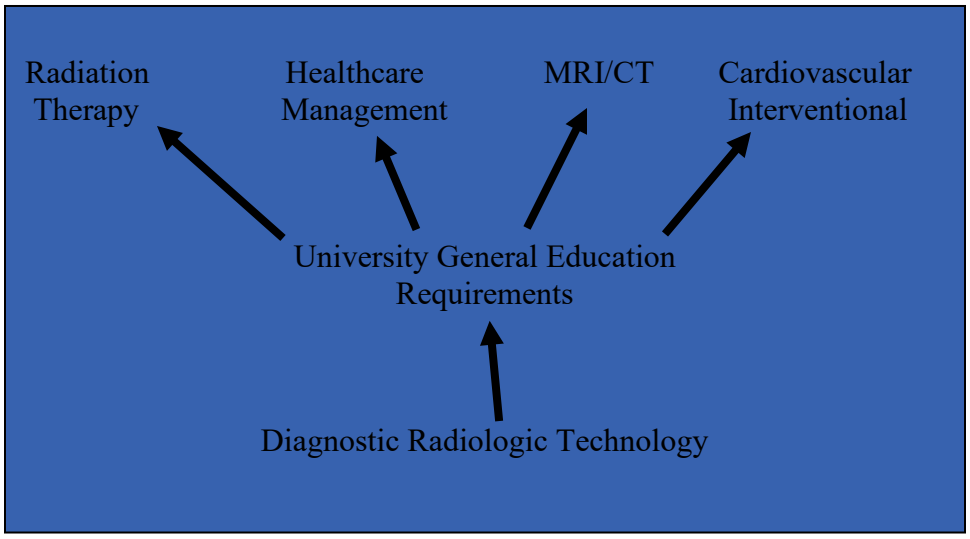

Figure 1

An important personal quality that is closely evaluated throughout your training is your ability to relate to the patient and to provide both physical and emotional support to the patient. Another quality or trait is your ability to work as part of a team and interact successfully with department and hospital personnel. The Radiologic Sciences faculty wish you success in the Radiography component. We are here to assist you in pursuing your newly chosen profession.

PURPOSE OF HANDBOOK

This handbook is designed to serve as in informational guide to assist in the orientation of students new to the Radiologic Sciences Program. It serves to clarify policies and procedures governing your actions and practices as a student in the clinic setting of the Radiography component. Radiologic Sciences students are expected to be familiar with the following information.

SOUTHERN ILLINOIS UNIVERSITY FOCUS STATEMENT

Southern Illinois University Carbondale offers a full range of baccalaureate programs, is committed to graduate education through the doctoral degree, and gives high priority to research. It receives substantial federal support for research and development and annually awards a significant number of doctoral degrees balanced among selected liberal arts and sciences disciplines and professional programs. In addition to pursuing statewide goals and priorities, Southern Illinois University Carbondale:

- strives to develop the professional, social, and leadership skills expected of college students and to improve student retention and achievement;
- supports the economic, social, and cultural development of southern Illinois through appropriate undergraduate, graduate, and professional education and research;
- develops partnerships with communities, businesses, and other colleges and universities, and develops utilization of telecommunication technologies;
- cultivates and sustains a commitment in research and instruction to problems and policy issues related to the region and the state's natural resources and environment;
- strives to meet the health care needs of central and southern Illinois through appropriate health-related programs, services, and public health policy; and,
- cultivates and sustains diversity through a commitment to multiculturalism, including international programming.

MISSION STATEMENT OF THE SCHOOL OF HEALTH SCIENCES

The School of Health Sciences seeks to inspire and cultivate vision through personal involvement of students with faculty toward achieving technical expertise for success in a diverse and changing society.

RADIOGRAPHY PROGRAM MISSION STATEMENT:

The mission of the Radiography Program at Southern Illinois University Carbondale is to provide a quality program integrating education, research and service in order to meet the needs of the profession and improve health care of the people and communities we serve.

RADIOLOGIC SCIENCES PROGRAM OBJECTIVES

To meet this mission, the objectives of the overall Radiologic Sciences Program are:

1. To insure that all applicants have an equal opportunity to be accepted into the program.
2. To insure that all students have an equal opportunity to succeed when enrolled in the program.
3. To continually evaluate and modify curriculum requirements to comply with the *Standards* as defined by accrediting agencies specifically responsible for the Radiologic Sciences program and Southern Illinois University at Carbondale in general. (E.g., Joint Review Committee on Education in Radiologic Technology)
4. To provide the students with a course of study which will enable them to qualify to take the American Registry Examination in Radiography, and the advanced modalities.
5. To provide the student with accurate information concerning employment opportunities.
6. To provide the southern Illinois area health care facilities with a continual source of qualified radiographers and advanced modality practitioners.

Radiologic Sciences GOALS

The field of Radiologic Sciences is an integral part of the health care team and requires that members within this team recognize this interdependence. We must function and perform this service in the most qualified manner possible. Southern Illinois University at Carbondale strives to provide educational experiences such that those students who graduate have had foundations for performing duties of the profession in a qualified manner.

The following goals define this philosophy:

1. To provide the students with a course of study which will enable them to qualify to take the American Registry Examination in Radiography.
2. To provide the Southern Illinois area health care facilities with a continual source of qualified radiographers.
3. To provide the student with the necessary prerequisites to enable him/her to enter Advanced Modality programs in the radiological sciences following graduation.

4. To provide the student with accurate information concerning employment opportunities.

5. To continually evaluate and modify curriculum requirements to comply with the Essentials as defined by accrediting agencies specifically responsible for radiography programs and Southern Illinois University at Carbondale in general.

6. To insure that all applicants have an equal opportunity to be accepted into the program.

7. To insure that all students have an equal opportunity to succeed when enrolled in the program.

To meet this mission, the goals of the Radiography Program are to:

Goal 1: Prepare the student to practice as a competent entry-level professional Radiographer by offering a balanced curriculum and quality didactic and clinical instruction.

- Students will be clinically competent upon graduation.
- Graduates will pass ARRT Radiography certification exam on first attempt.
- Graduates indicate overall satisfaction with education from the program.
- Clinical Supervisors indicate graduate demonstrates essential skills and knowledge necessary to work effectively with other health care practitioners.

Goal 2: Provide didactic and clinical experiences that lead to research in educational, professional, or health care issues relating to radiography.

- Students demonstrate essential skills to plan and execute research on various topics.

Goal 3: Provide avenues to students for professional development and growth within the profession.

- Graduates will become members of professional organizations.
- Graduates will maintain their CE activities to grow with the profession.
- Graduates will choose an Advanced Modality to further their professional career.

Goal 4: Provide avenues for students to develop and apply skills in effective communication necessary for successful radiography practice.

- Students demonstrate effective verbal communication skills.
- Students demonstrate effective written communication skills.

Goal 5: Provide avenues for students to develop and apply skills in critical thinking.

- Students demonstrate effective critical thinking skills.
- Graduates demonstrate effective critical thinking skills.

Goal 6: Provide avenues for students to develop and apply skills in problem solving necessary for successful radiography practice.

- Students demonstrate effective problem solving skills.
- Graduates demonstrate effective problem solving skills.

Goal 7: Provide a clinical and didactic environment that leads to the development of clinical skills and competence appropriate to an entry-level radiographer.

- Students will demonstrate simulation laboratory competence.
- Students demonstrate continual improvement of skills as they progress through the program.
- Students demonstrate professional development and growth as a result of didactic and clinical experiences.
- Students will be clinically competent upon graduation.

DESCRIPTION OF THE PROFESSION[1]

The profession of radiography (Radiologic Sciences) requires the ability to provide appropriate healthcare 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:

1. Apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.
2. Determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient.
3. Evaluate radiographic images for appropriate positioning and image quality.
4. Apply the principles of radiation protection to the patient, self, and others.
5. Provide patient care and comfort.
6. Recognize emergency patient conditions and initiate lifesaving first aid and basic life-support procedures.
7. Detect equipment malfunctions, report same to the proper authority and know the safe limits of equipment operation.
8. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
9. Participate in radiographic quality assurance programs.
10. Provide patient/public education related to radiographic procedures and radiation protection/safety.

[1]"Essentials and Guidelines of an Accredited Educational Program for the Radiographer," The Joint Review Committee on Education in Radiologic Sciences. (1994). Page 1.

ACCREDITATION

The Radiologic Sciences program at Southern Illinois University at Carbondale is an accredited Radiography Program by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

It is also recognized as an accredited educational program by the American Registry of Radiologic Technologists (ARRT).

TECHNICAL STANDARDS FOR ADMISSION:

Students entering the field of Radiologic Sciences must have the following abilities in order to successfully complete the program.

Students must be able to:

a. Lift 50 pounds of weight and/or assist in lifting patients using proper body mechanics.

b. Push large pieces of equipment as in mobile radiographic units or mobile fluoroscopic units.

c. Push patients in wheelchairs or on stretchers.

d. Cope with, and function in the stressful situations encountered in the radiology department and in the hospital environment.

e. See, hear, and respond quickly to patients in emergency situations.

f. Communicate with patients and other health care professionals in oral and written forms.

g. Understand requisitions and other records necessary for proper patient care.

h. See the patient and collimator lights to properly position for radiographs.

i. Move radiographic tubes, tables, upright Bucky trays, etc. as necessary for each exam.

j. Walk for long distances as is necessary for portable radiography.

k. Performs all duties as required of a Radiologic Technologist

Students will be given reasonable assistance in overcoming any difficulties with these standards, however, there is no guarantee that all applicants will be able to successfully complete the program if unable to perform these actions. Students concerned about these requirements should contact the Program Director.

Office phone numbers of University program faculty: If there is no answer after the fifth (5th) ring, then the call is automatically transferred to the respective RADS faculty member's answering machine/voice mail.

Sandi Watts: 618-453-7229 (Program Director, Radiography & MRI); E-mail: sjwatts@siu.edu

Logan Queen: 618-453-8884 (Radiography Clinical Coordinator); E-mail: logan.queen@siu.edu

Jennifer Walker: 618-453-8812 (Radiography Instructor & Clinical Coordinator MRI/CT); E-mail: jennifer.walker@siu.edu

Dustin Nehrt: 618-453-8884 (Assistant Lecturer MRI/CT); E-mail: dustin.nehrt@siu.edu

Shannon Anderson:618-453-2375 (Medical Sonography Instructor); E-mail: sanderson@siu.edu

Lisa Bickel: 618-453-7284 (Medical Sonography Instructor); E-mail: lisa.bickel@siu.edu

Rick McKinnies: 618-453-7260 (Program Director Radiological Sciences); E-mail: rmck@siu.edu

Brandon Hirsch: 618-453-8889 (Radiation Therapy Clinical Coordinator); E-mail: bhirsch110@siu.edu

Courtney East: 618-453-1346 (Academic Advisor, Radiologic Sciences); courtney.east@siu.edu

School of Health Sciences (office) - 618-453-7211. Someone is available to answer the phone from 8 a.m.-4:30 p.m., Monday through Friday.

The fax number is 618-453-7020.

Mailing Address: <Faculty Member Name>
ASA-School of Health Sciences--Radiologic Sciences
1365 Douglas Drive, Mail Code #6615
Southern Illinois University Carbondale

PROFESSIONAL OPPORTUNITIES

Professional Organizations

In order to keep abreast with new developments and maintain a high degree of professionalism, the student radiographer is strongly urged to become active in his/her professional societies and organizations.

American Registry of Radiologic Technologists (ARRT)
1225 Northland Drive
St. Paul, MN 55120-1155
Ph: (651) 687-0048URL: **www.arrt.org**

Illinois State Society of Radiologic Technologists (ISSRT)
2532 Commons Parkway
Belleville, IL 62221
URL: **www.issrt.org**

American Society of Radiologic Technologists (ASRT)
1500 Central Avenue SE
Albuquerque, NM 87123-3917
Ph: (800) 444-2778 or (505) 298-4500
Fax: (505) 298-5063
URL: **www.asrt.org**

Section for Magnetic Resonance Technologists (SMRT)
2118 Milvia Street, Suite 201
Berkeley, CA 94704
Ph: (510) 841-1899
Fax: (510) 841-2340
Email: **smrt@ismrm.org**

American Registry of Diagnostic Medical Sonographers (ARDMS)
51 Monroe Street, Plaza East One
Rockville, MD 20850-2400
Ph: (800) 541-9754
URL: **www.ardms.org**

Society of Diagnostic Medical Sonographers (SDMS)
27545 Dallas Parkway, Suite 350
Plano, TX 75093-8730
Ph: (214) 473-8057 (800) 229-9506

Chicago Area Radiation Therapists (CART)
URL: **www.chicagotherapists.com**

American Society of Therapeutic Radiology and Oncology (ASTRO)
1891 Preston White Drive
Reston, VA 20191
Ph: (800) 962-7876, (703) 298-6760, or
(703) 648-8900
Fax: (703) 264-2443
URL: **www.astro.org**

Student membership in the professional organizations is offered at affordable rates. Applications for the professional organizations are available from the Radiography Program Director.

Career Mobility

Radiologic Science graduates are prepared for employment in hospitals, medical centers, industry, physician's offices, and public health. Graduates may also be qualified for administration of x-ray departments or to assist in medical research.

Program graduates are not guaranteed job placement, but reasonable effort is made to assist them in finding a position. Medical imaging and therapeutic technologists are in great demand in other areas of the United States.

Many avenues for advancement within the field are available, depending on personal interests and ability. Additional education may be necessary.

These are as follows:

	Hospital-Based Certificate	Associate Degree	Baccalaureate Degree	Masters Degree	Doctorate Degree
Staff Technologist	X	X	X		
Advanced Modality Technologist	X	X	X		
Clinical Instructor	*	X	X		
PACS Manager	*	*	X		
Chief Technologist or Supervisor	X	X	X	X (preferred)	
Clinical Coordinator	*	*	X	X (preferred)	
Program Director	*	*	X	X	X (preferred)
Imaging/Therapy Administrator	*	*	*	X	X (preferred)

* This is dependent upon years of experience.

PROFESSIONAL ETHICS

American Registry of Radiologic Technologists

The mission of the American Registry of Radiologic Technologists (ARRT) is to promote high standards of patient care by recognizing qualified individuals in diagnostic imaging, interventional procedures and therapeutic treatment. The modalities of interest include, but are not necessarily limited to:

radiography	quality management
nuclear medicine	cardiovascular-interventional technology
radiation therapy	cardiac-interventional technology
computed tomography	vascular-interventional technology
magnetic resonance imaging	sonography, all body areas
bone densitometry	vascular sonography

In support of this mission, the ARRT:

- adopts and upholds standards for educational preparations for entry into the profession;
- adopts and upholds standards of professional behavior consistent with the level of responsibility required by professional practice;
- develops and administers examinations that assess the knowledge and skills underlying the intelligent performance of the tasks typically required by professional practice in the modality.

Eligibility for certification in ARRT primary disciplines and advanced modalities include requirements in three important areas: ethics, education and examination.

Graduates of accredited programs are eligible for registration by examination sponsored by the American Registry of Radiologic Technologists upon completion of the didactic and clinical requirements of the program. The successful passing of the ARRT examination allows the graduate to place the initials RT(R)(ARRT) after his/her name.

"Candidates must be of good moral character. Generally, the conviction of either (1) a felony, or (2) any offense, misdemeanor or felony involving moral turpitude, indicates a lack of good moral character for Registry purposes. Those who have been convicted of a crime may be eligible for registration if they have served their entire sentence, including probation and parole, and have had their civil rights restored," (ARRT Examinee Certification Handbook).

ARRT Standards of Ethics

The *Standards of Ethics* of the ARRT apply solely to persons applying for examination and certification by ARRT (Candidates) and to persons holding current registrations by ARRT or formerly held registrations by ARRT (Registered Technologists). The *Standards of Ethics* are

intended to be consistent with the mission statement of the ARRT, and to promote the goals it sets forth.

Applicants for registration by the American Registry of Radiologic Technologists (ARRT) must at the time of application and on subsequent occasions when the registration is renewed, agree to abide by the ARRT Code of Ethics. The Code of Ethics (ARRT Examinee Certification Handbook) is listed in **APPENDIX A**.

Rules of Ethics

The Rules of Ethics form the second part of the *Standards of Ethics*. They are mandatory and directive-specific standards for minimally acceptable professional conduct for all present Registered Technologists and Candidates. Certification is a method of assuring the medical community and the public that an individual is qualified to practice within the profession. These Rules of Ethics are intended to promote the protection, safety and comfort of patients. **These Rules of Ethics are enforced by the ARRT!**

Registered Technologists and Candidates engaging in any of the conduct or activities noted in the Rules of Ethics, or who permit the occurrence of such conduct or activities, have violated the Rules of Ethics and are subject to sanctions. The twenty-one (21) Rules of Ethics and their subsections are listed at www.arrt.org/ethics, and in **APPENDIX A**.

One issue addressed by the Rules of Ethics is conviction of a crime—which includes felony, gross misdemeanor or misdemeanor, with the sole exceptions of speeding and parking violations. ***All alcohol and/or drug related violations must be reported when applying for certification by the ARRT.*** The ARRT defines conviction to include a criminal proceeding where a finding or verdict of guilt is made or returned but the adjudication of guilt is either withheld or not entered, or a criminal proceeding where the individual enters a plea of guilty or nolo contendere.

UNIVERSITY STUDENT CONDUCT CODE

(http://srr.siu.edu)

Southern Illinois University Carbondale (SIUC) is dedicated not only to learning, research, and the advancement of knowledge, but also to the development of ethical and responsible persons. The University seeks to achieve these goals through sound educational programs and policies governing conduct that encourages independence and maturity. By accepting membership in this University, an individual joins a community characterized by free expression, free inquiry, honesty, respect for others, and participation in constructive change. All rights and responsibilities exercised within this academic environment shall be compatible with these principles.

Students shall be free to examine all questions of interest to them and to express opinions. They shall be guaranteed all constitutional rights including free inquiry, expression, assembly, and disciplinary due process. All regulations shall seek the best possible reconciliation of the principles of maximum academic freedom and necessary order. Any behavior, which has been influenced by a student's use of drugs or alcohol, will not limit the student's responsibility for that behavior. **(*In other words, the student is responsible for his/her behavior regardless of drug and/or alcohol use*).**

It is each student's responsibility to know and comply with the SIUC Student Conduct Code and any policies referenced therein. In addition to the Student Conduct Code, students are also subject to other policies and procedures, including but not limited to, Student Behavior: Policy and Procedures for Administrative Review, Residence Halls Guidebook, departmental policies.

These regulations shall be known as the Student Conduct Code for SIUC. The regulations contained herein are established under the authority granted by law to the Board of Trustees to establish rules and regulations for SIU and pursuant to *3.C Policies* of the Board of Trustees authorizing the Chancellor to develop regulations dealing with student rights and conduct. All students of the campus community have the responsibility to comply with these regulations. The responsibility for enforcement of the code rests with the Chancellor of SIUC.

CHAPTER 2--STUDENT INFORMATION

SCHOOL CALENDAR

All SIUC Radiologic Sciences students are expected to attend to their clinical internship sites for the full semester. Any deviation from the full semester must be approved by the Program Director or the appropriate modality Clinical Coordinator, and the Clinical Supervisor at the internship site.

During each clinical internship semester, all SIU recognized holidays and University breaks follow the University academic calendar. (http://registrar.siu.edu/calendars/).

CLINICAL SITE ASSIGNMENTS

Throughout the length of the Radiologic Sciences Program (RADS), there are four clinical rotations: two clinic rotations in the diagnostic radiography portion of the Program; and, two clinic rotations required for each advanced modality (MRI/CT, Cardiac Interventional, and Radiation Therapy). Each clinical rotation lasts an entire University semester and is based upon the student's clinical education requirements.

In order to provide the student with a satisfactory clinical experience, the Radiologic Sciences Program strongly discourages placing a student at a clinical site where a member of the student's immediate family is employed in the Radiology Department. The Program defines "immediate family" as spouse, children, sibling(s), parent(s), in-law(s), grandparent(s), step-child(ren), step-parent(s), step-sibling(s), and former spouse.

Hospital Orientation

All hospitals and clinical sites affiliated with the SIUC Radiologic Sciences Program have the ethical and professional responsibility to their employees, patients and the community to provide an environment that maintains the highest standards for safety, health and productivity.

To introduce the RADS student to the clinical setting and its standards, all our affiliated clinical facilities require each clinical internship student to participate in **a hospital orientation, completed at least two weeks prior to the first day of the clinical semester**. Each student must bring to this hospital orientation a copy of his/her individual immunization record including the result of his/her:

- QuantiFERON(R)-TB Gold Plus;
- proof of Hepatitis B immunity;
- proof of recent Influenza immunity; and,
- proof of Varicella (Chicken Pox) immunity.

The student's immunization record enables the hospital to document the student's health status prior to direct patient contact.

To ensure a greater focus on safe practices, for the protection of hospital patients, employees, visitors and the community-at-large, all our clinical sites are subjecting any clinical internship student (regardless of the medical field) to the same hospital orientation procedures that new employees attend. As such, they require each clinical internship student to undergo a clinical drug screening and a criminal background check as a component of his/her hospital orientation, **and** as a condition of his/her attendance at the clinical site.

Any RADS student refusing to participate in this drug screening and background check will automatically be hindered from completing the Radiography Program!

Any conviction is reviewed on a case-by-case basis. Under no circumstances is a RADS student be allowed to participate in a clinical internship if he/she has a misdemeanor and/or felony conviction in the following areas:

- Abuse
- Neglect
- Exploitation of an adult or a child
- Identification as an excluded provider by the Office of Inspector General (OIG; https://www.illinois.gov/hfs/oig/Pages/Welcome.aspx).

When the RADS clinical internship student has a criminal conviction deemed unacceptable to the hospital, the student will not be permitted to attend that clinical site for his/her RADS internship. This may also result in the student not being allowed to continue in the Program. Thus, the student would be removed from the RADS Program.

If the criminal background check shows no criminal convictions or a conviction that is deemed inconsequential to the removal of that student from the internship site, then the background check is filed, and the student will be permitted to attend the clinical site for his/her internship semester.

STUDENT EXPENSES

Books: Book costs vary each semester depending on the modality. Most of the textbooks purchased for the Fall semester (sophomore year) will be used during the clinical semesters, summer and spring semesters.

Criminal Background Check: Is performed to determine whether the student has history of past criminal convictions, arrests, or other criminal activity. The criminal background check examines the student's:

- Residence History;
- County-Criminal History;
- Nationwide-Sexual Offender Index; and
- Nationwide-Healthcare Fraud and Abuse Scan

A few of the RADS clinically affiliated hospitals perform their own background check on student interns, at the hospital's expense. While most of the RADS clinically affiliated hospitals require the student interns to acquire and pay for their own background check.

The criminal background check is performed by **CastleBranch.com** (www.CastleBranch.com). The background check has an approximate 'life span' of 12 months.

Drug Screen: (Urine Drug Screen): All RADS clinically affiliated hospitals have a 'zero tolerance policy' for controlled substance use by employees and student interns. The urine drug screen examines the student's urine for evidence of controlled substances and their metabolites. The drugs/controlled substances (a.k.a. Ten Panel Drug Abuse Screen) identified include:

Amphetamines	Methadone
Barbiturates	Methaqualone
Benzodiazepines	Opiates
Cocaine metabolites	Phencyclidine
Marijuana metabolites	Propoxyphene

The urine drug screen is performed by Castle Branch.com (www.CastleBranch.com).

Housing: Students are responsible for securing their own housing when assigned to clinical sites. The Radiologic Sciences Program faculty provides limited housing information for student convenience and assistance, but does not accept responsibility for the nature, condition, or

location of the housing facilities. None of the facilities have been examined nor approved by Program/University personnel. Neither Southern Illinois University Carbondale, nor any of its faculty, agents, or employees assume responsibility for any lease or rental agreements and cannot be held liable for nonpayment or damage.

Influenza (Flu) Shot: This immunization is acquired at the SIUC Student Health Center, from the student's personal healthcare provider or at any local pharmacy. The flu shot has an approximate 'life span' of 12 months. Therefore, the student should get the flu shot 1-2 months prior to attending his/her clinical semester. If the student is participating in a Fall clinical semester, then the student should get the flu shot in late September/early October, or as soon as it becomes available.

Liability Insurance: For the duration of time that he/she is in the clinical setting of our Program, each student has liability insurance coverage through the Southern Illinois University Self-Insurance Program. This insurance policy is in the amount of $3,000,000 for each student. It applies to all University students assigned to serve internships with external facilities when the students are not paid by the facility **and** the student earns academic credit upon completion of the internship assignment. Such insurance coverage is not available to any student actually employed (paid) by the external facility or in situations in which no academic credit is available to the student upon completion. (Certificate of Insurance is in **APPENDIX J**).

Transportation: Students are responsible for their own transportation to and from Campus and the clinical facilities. Students may park only in designated areas, both at the University and clinical sites.

Tuition: All Radiologic Sciences students are eligible to apply for any available financial aid. The School of Health Sciences has a Scholarship Fund for qualified students. The University has incorporated a time-based payment plan at http://registrar.siu.edu/tuitionandfees/

Uniforms: Students purchase their own uniforms according to the prescribed dress code of the Radiography Program.

RADIOGRAPHY PROGRAM DRESS CODE

Clothing is a form of non-verbal communication that reflects confidence in ability and judgment, personal behavior and sense of professional image. Our patients' perceptions of competence and professionalism of the radiographer are often based on first impressions, which are processed into stereotypical responses to the image the radiographer presents. Thus, **the first impression of the radiographer in uniform is the strongest statement of professionalism**.

It is essential as radiography faculty and students that we present ourselves as professionals. We must look and act in a manner that conveys authority and integrity. It is important to the overall impression of our Program that we maintain a high standard of professionalism. Therefore, a strict dress code policy has been developed. This policy will be enforced equitably, fairly, and the final authority for interpretation lies with the Radiography Program Director.

Certain basic standards are to be observed by all Radiography students. Among these are:

1. All clothing and jewelry must be consistent with professional/business dress standards applicable to the work responsibilities involved, and must be appropriate for reasonably anticipated public contact. Specifically:
   a. All outer garments are to be clean, pressed, properly sized and in good repair.
      (1) Solid maroon scrubs (shirt & pants) are to be worn in the clinical/ hospital setting.
         (a) Radiography Program logo is embroidered on left chest area of scrub shirt and on left sleeve.
         (b) Scrubs of a different color may be worn only in an operating room environment, including angiography, **or** when a student's uniform has been soiled by patient body fluids.
      (2) The waistband of the scrub pants must be at the level of the student's natural waistline.
      (3) A knee-length white lab coat, or a hip-length scrub jacket is part of the Radiography student uniform and is to be clean, pressed, properly sized and in good repair.
         (a) Radiography Program logo is embroidered on left chest area of the lab coat or scrub jacket.
         (b) Acceptable colors of the scrub jacket are maroon, or white.
   b. Clothing, including attached buttons/pins, will not include visible statements advertising commercial products or expressing controversial/divisive viewpoints.
   c. Upper arms, legs, abdomen, chest and back must be covered at all times.
   d. No head apparel is to be worn indoors unless specifically prescribed/ authorized as part of a uniform.

e. Shoes should be plain, laced, or with a strap, with leather uppers and synthetic soles. Heels must have a broad base to give stability when walking or lifting. Shoes are to be kept clean and polished. Clogs, slides, and sandals are prohibited.

f. Sweatshirts, sweatpants, shorts, jumpsuits (unless part of an authorized uniform), and T-shirts or tank tops as outer garments are prohibited.

g. For personal safety and infection control:
   (1) Earrings should be limited to small button posts or studs; preferably one earring per ear, no more than 2 earrings per ear;
   (2) Wedding rings and rings without stones may be worn, preferably one ring per hand;
   (3) No dangling bracelets; and,
   (4) Wrist watches should fit comfortably and be of modest size.

h. Appropriate undergarments are to be worn at all times.

2. No body piercings of the face, nose, mouth and/or lips are to be worn indoors unless specifically prescribed/authorized as part of a uniform.

3. All tattoos and body art must be kept covered at all times.

4. All students must wear a name badge stating they are from the University during each clinical day. For facilities that supply the student with a separate badge, the identification badge must be worn so that the picture, name and department are easily visible at all times.

5. Hair, including beards and mustaches, is to be clean, neatly groomed, and kept in such a way as not to interfere with student duties or safety. Hair that is longer than the collar on males, or longer than the shoulder on females, is to be pulled back and fastened to prevent contamination and to decrease the spread of microorganisms such as pseudomonas and staphylococcus.

6. Make up, perfume and cologne are to be lightly applied.

7. Fingernails are to be clean, trimmed, and extend no further than 1/4" beyond fingertips. Clear or conservative light colored nail polish may be worn. Artificial and/or acrylic fingernails are prohibited in the clinical environment.

8. Personal hygiene practices are to be sufficient to ensure cleanliness and the **absence** of noticeable **body odor** and the absence of noticeable breath/mouth odor.

Clinical Attire for all SIUC Radiologic Sciences students:

Solid maroon scrubs (shirt & pants) with Radiography Program logo embroidered on left chest area of scrub shirt and on left sleeve.

Clean white or black athletic shoes, (walking or nursing shoes)
For example: Nurse Mates, Reebok, New Balance, Cherokee

Long white lab coat (mid-thigh or knee length) or a hip-length scrub jacket
Radiography Program logo is embroidered on left chest area of the lab coat or scrub jacket.
Acceptable colors of the scrub jacket are maroon or white.

No long sleeves protruding from beneath the sleeves of the maroon scrub shirts
No long-sleeve T-shirts;
No long-sleeve turtleneck shirts;
No long-sleeve mock turtleneck shirts.

No low-riding or hip hugging type of scrub pants

No scrub pants stuffed into socks

Neutral socks coordinated to maroon scrub pants

White or neutral undergarments (complete)

No sandals, clogs or Croc™ type foot ware

Failure to comply with the dress code will result in dismissal from clinic for the day as an unexcused absence.

STUDENT RECORDS

Files are maintained on the program's enrolled students. Those concerning grades, University admission forms, etc., are maintained in the Student Services building and are available to the student based on University policy. The School of Health Sciences maintains limited files regarding the student's progress upon admission into the School of Health Sciences. The availability of these files is dependent upon secretarial staff to retrieve such files. Access to these records is limited to the office where the records are held and may not be removed for any reason.

STUDENT HEALTH PROGRAM

Provided the Student Health Fee is paid by the student each semester, all facilities and privileges of the campus program are available to the Radiologic Sciences students. (http://shc.siu.edu). Should the student elect not to pay the fee, **he/she is responsible for providing proof of personal health/medical insurance, by a recognized insurance company, prior to attendance of each clinical rotation,** to the SIUC Radiologic Sciences faculty.

RADS Health Record

The Radiography Advisory Committee has developed a personal health record form.

Prior to starting the first clinical semester, each student must provide proof of good physical health and current immunizations. All Radiography students will be in close contact

with people who may have communicable diseases. This places the student at risk of contracting these diseases, especially if lacking recent immunizations.

The National Immunity Program (NIP) of the Centers for Disease Control and Prevention (CDC) lists the following vaccines as needed by all adults working in health care related professions.

- Hepatitis B vaccine
- Influenza vaccine
- Measles-Mumps-Rubella (MMR) vaccine
- Tetanus-Diphtheria vaccine
- QuantiFERON Tuberculosis (TB)
- Varicella (Chicken pox) vaccine

Additionally, the CDC and the National Meningitis Association (NMA; www.nmaus.org) recommend that college students living in dormitories get the meningitis vaccine (for meningococcal meningitis).

These vaccines are listed as either "required" or "strongly recommended" on the Radiologic Sciences Health Record form. More information on these vaccines are found on the Vaccine-Preventable Adult Diseases website (http://cdc.gov/vaccines/vpd-vac/adult-vpd) and the 2017 Recommended Immunizations for Adults by Age at (http://cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf).

Clinical records are kept in the respective Clinical Coordinator's office and are also available for perusal only upon request by the student in cooperation with the appropriate Clinical Coordinator.

Privacy of all individuals' files is guaranteed according to the Federal Privacy Act (FERPA).

Professional Observation

Prior to admittance into the Radiologic Sciences Program, and to help prospective students more fully comprehend the role of the radiologic technologist, each student is ***strongly encouraged*** to spend time observing the duties of an ARRT registered radiologic technologist in a hospital or clinical setting.

GRADING SYSTEM

Each syllabus, distributed to the student at the onset of the semester, specifies criteria by which the grade for the course will be determined. University policy is used regarding the point system equivalency per grade; however, the scale for grade assignment is not standardized throughout the University and will be outlined by each instructor.

Clinical grades are derived by using a Clinical Semester Grade Sheet for the respective clinical semester. The intent of this evaluation tool is to objectively calculate a clinical grade by utilizing a system that correlates weighted values to those factors that are important in assisting the students to become competent, responsible Radiographers.

Students who fail one or more of the Radiologic Sciences courses do not continue to the next sequence of the program. It may not be possible for the student to re-enter the program in the future. If circumstances permit, the student's records are reviewed and he/she may be readmitted the following year pending University faculty decision, and as space is available.

LIBRARY PRIVILEGES (http://lib.siu.edu/)

Morris Library is located in the center of campus and is open to all registered students. It provides over one and a half million volumes, fifteen thousand current periodicals, and over one and a half million microforms. Additional reserve references, documents, phonograph records and art prints are present.

REGISTRY EXAM (www.arrt.org)

Students must have completed and passed all required courses in the diagnostic radiography curriculum of the Radiologic Sciences program sequence to qualify for the American Registry of Radiologic Technologists Exam. Continuance in an advanced modality is contingent upon evidence of passing the American Registry of Radiologic Technologists Exam on the first attempt, by July 1st between the junior and senior years.

The advanced modality Board exams in Computed Tomography, Magnetic Resonance Imaging, Cardiac Interventional, or Radiation Therapy are taken at least twelve (12) months after the student has passed the ARRT Registry Exam in Diagnostic Radiography.

CLINICAL ATTENDANCE POLICY

During the clinical semester, each student is required to attend his/her clinical internship site Monday through Friday, for thirty-seven hours per week (37 hrs/wk), for the entire semester. *Lunchtime* and University-recognized holidays are excluded in the calculation of clinical hours.

Assigned clinical hours may be dayshift (E.g., four 8 hour days and one 5 hour day), or at the clinical instructor's discretion the student may have a clinical schedule of three 10-hour days and one 7 hour day (E.g. Monday thru Thursday; or Tuesday thru Friday). Clinical hours on evening shift may not exceed 37 hours/week, nor exceed 25% of the student's total clinical hours for his/her entire Radiography clinical education. Numerous clinic sites do not offer evening shifts for students, therefore, there is no guarantee of evening hours for every individual student. An exception will be given if a clinic site only has room for an evening rotation for the student.

During each clinical semester, there are scheduled clinical days. **All absences must be made up**. A make-up schedule will be determined by the Clinical Supervisor/Clinical Instructor in conference with the appropriate University staff. The only exceptions to this will be made at the Clinical Supervisor's discretion.

Tardiness

The student is expected to report to the clinical facility at the designated time. Tardiness is not responsible, professional behavior.

It is the student's responsibility to call the Clinical Instructor within **30 minutes** of the beginning of the clinical shift, if the student will not be present, or if she/he will be late.

Likewise, students are not authorized to leave their clinic site early without permission.

Habitual/chronic tardiness will not be tolerated. For each late arrival in which the student did not call-in, nor attempt to make-up the late arrivals, then five points (5 pts) for **each** infraction will be deducted from the student's final clinical grade.

Chronic Absenteeism Not Related to Injury or illness

Even though the student makes up all absences, chronic absenteeism is not acceptable and will have a negative impact on the student's clinical grade.

- Any student missing three days = final clinical grade is decreased by 10 points.
- Any student missing five days = final clinical grade is decreased by 15 points.
- Any student with **more than seven absences may be dismissed** from the program.

When a student misses clinical days and does not call-in, nor make any effort to prepare a clinical make-up schedule with his/her Clinical Instructor, then the above grade penalty will be applied to the student's final clinical grade for the semester.

Absence due to Illness or Injury

If a student is absent for two or more consecutive days due to illness/injury, then it is required that he/she obtain a statement from his/her personal physician attesting to the student's illness or injury, and his/her fitness to return to classes and clinical patient contact.

The following table summarizes the responsibilities of the Radiography student, Clinical Instructor and RADS faculty as they relate towards tardiness and absences from a clinical site.

PARTICIPANT		ACTION—RESPONSIBILITY
Student	**1.**	**Tardiness** a. Notifies Clinical Instructor/Supervisor as to late arrival within 30 minutes from start of scheduled day shift. b. Reports to Clinical Instructor/Supervisor upon arrival in clinical area. c. Makes up time at end of day shift.
	2.	**Illness, Prolonged Illness or Injury** a. Notifies Clinical Instructor as soon as possible of illness/ injury. b. Calls daily to notify Clinical Instructor of prolonged absence. c. Keeps Clinical Instructor informed of progress. d. Notifies Clinical Instructor if taking any medications that will alter student's total performance/behavior. e. Schedules make-up time as soon as health allows.
Clinical Instructor	1.	Documents all tardies/absences on student Time Sheet.
	2.	Keeps student informed of all time to be made up.
	3.	Counsels and advises students.
	4.	As necessary, assigns student to non-critical areas.
	5.	Keeps University RADS faculty informed of student status, or of potential student problems.
RADS Faculty	1.	Reviews all records.
	2.	Advises Clinical Instructor.
	3.	When necessary, counsels and advises students.
	4.	Makes final decisions concerning extended/prolonged absences.
	5.	Makes final decisions concerning disciplinary actions for habitual tardiness.

If extenuating circumstances are involved, requiring the student take an indefinite leave of absence, then a committee comprised of clinical and SIUC faculty will review the situation and make appropriate recommendations for continuance in the Program.

Inclement Weather Policy

If bad weather (snow, ice, flooding, tornado, earthquake, etc.) occurs on a clinical day, the student is responsible for finding out if the **local university (not community college)** in the clinical site area is closed.

This reference site must be coordinated with your Clinical Instructor the first week of clinical. If that local university is closed due to hazardous road conditions, then the student is excused from going to clinical even though SIUC may be open. The student must write "Snow Day" on this/her Time Sheet, and this absence will be verified by the Clinical Supervisor.

The student is still expected to call in, to the Clinical Instructor or his/her designee, within 30 minutes of the student's regular starting time, to explain the absence.

If the local university is open, but the student cannot get to his/her clinical site, then he/she must make up the day. The student is still expected to call in, to the Clinical Instructor or his/her designee, within 30 minutes of the student's regular starting time, to explain the absence.

Please note: All unexcused "snow days" must be made-up. If the public elementary schools are closed due to temperature extremes (frigid cold), then the SIUC Radiography student is still expected to go to clinical as originally scheduled.

The student shall work with his/her Clinical Supervisor/Clinical Instructor to arrange a suitable schedule to make-up the clinical time.

Early Dismissal Guidelines

In the event of afternoon weather and/or road conditions becoming unsafe, the Clinical Instructor may use his/her discretion concerning early dismissal of students for that day. A suggested guide for early dismissal due to unsafe weather and/or road conditions could be the:

1. Cancellation of local high school sports and extracurricular activities for that evening.
2. Cancellation of evening classes at the local university, community college and education extensions centers.
3. Cancellation of all evening community and/or religious activities.

Students dismissed early due unsafe weather and/or unsafe road conditions are not required to make up the clinical time.

Request for Time-Off

Students requesting time off for personal reasons must present this request to the Clinical Supervisor/Clinical Instructor **at least two weeks in advance**.

If granted, students must arrange and schedule "make-up" time with the Clinical Supervisor/Clinical Instructor prior to the leave.

All jury duty time must be made up.

All time off taken to meet training requirements for any military service (Reserves, ROTC, etc.) must be made up.

Students are advised to schedule medical, dental and other appointments outside of class and/or clinic hours to avoid penalty.

Students with children are advised to have contingency arrangements made for child-care in case of illness or other unforeseen circumstance.

Bereavement Leave

When a member of a student's immediate family dies, then the student is permitted 2 days off for bereavement leave. These 2 days are not made up. If more than 2 days are needed, then the student must make up those additional days. On the student's Time Sheet, these days are marked with "BL".

To document family relationship, the student must submit a copy of the obituary from the local newspaper, or a bulletin/flyer from the church, temple, mosque, or funeral home.

The Radiography Program defines "immediate family" as spouse, children, sibling(s), parent(s), in-law(s), grandparent(s), step-child(ren), step-parent(s), step-sibling(s), and former spouse.

Personal Day(s)

Radiography students participating in their first clinical semester (RAD 222) are permitted **1 Personal Day** off during the Spring clinical semester.

Radiography students participating in their second clinical semester (RAD 332) are permitted **2 Personal Days** off during the Fall clinical semester.

The conditions that apply to these Personal Days are:

- The Personal Day(s) is/are scheduled with the student's Clinical Instructor and is not made-up.
- If the student misses a clinical day due to sickness or injury, then the Personal Day(s) is/are used for a make-up day.
- If no Personal Day/Days are used, AND no clinical day/days are missed due to sickness, then the Radiography student is done with the clinical semester 1day/2 days early.
- On the student's Time Sheet, the day(s) is/are marked with "PD".

UNIVERSITY HOLIDAYS

All students will follow the holiday schedule for Southern Illinois University at Carbondale (http://registrar/siu.edu/calendars/ click on the appropriate academic year).

Clinical Instructors may use their discretion on hospital holidays that are not observed by SIUC. Hospital holidays not observed by SIUC may be used as make-up days, provided there is appropriate student supervision by a qualified technologist. Otherwise, these hospital holidays are not made up.

COMMUNICABLE and INFECTIOUS DISEASE POLICY

If a student, through patient contact, contracts a communicable disease, such as:

measles	herpes	hepatitis B
mumps	tuberculosis (TB)	AIDS-Related Complex (ARC)
chicken pox	mononucleosis	meningitis
rubella	HIV/AIDS	C. Diff

It is the **student's responsibility** to inform the Clinical Supervisor and the Radiography Clinical Coordinator of such disease and treatment. In the event of such disease contraction, Radiography faculty will attempt to counsel the student concerning career options and future plans, where applicable.

Current Program policy and University policy toward infectious (communicable) disease will be followed. These policies are described in **APPENDIX F**.

COVID-19 PANDEMIC

If a student tests positive or is exposed to Covid-19 during a clinical semester, the student will follow the protocol of the current clinic site.

Each student is to follow their clinical site's Covid-19 Safety Precautions while at clinical site.

INSURANCE, ACCIDENTS AND INCIDENTS

Medical Insurance

Each student is required to have medical coverage through a private insurance company, or through the University Health Service Program. All injuries sustained by students at the clinical site or on campus must be reported to the Radiography Clinical Coordinator. **Failure to report accidents and complete the required paperwork within 10 days from the time of injury may result in a rejection of the claim by the student's insurance company or the University Health Service.**

Students may go to their personal physician **or** be treated in the Hospital Emergency Room (ER) if medical attention is needed. Treatment of students in the ER is **not** free regardless of whether or not hospital personnel suggest they go there.

Incidents and Accidents

Following every accident or incident involving injury or possible injury, the student is expected to notify his/her Clinical Supervisor immediately. Upon notification, the Clinical Supervisor is to arrange to have the student evaluated by a physician in the Emergency Room or

in the Employee Health Clinic. A Radiology department or hospital incident report should be completed as soon as possible. The University Injury/Injury/Hazard Report is found in **APPENDIX G,** and may be completed, as well.

The following table summarizes the responsibilities of the student, Clinical Supervisor and University faculty as they relate to student incidents and accidents at a clinical site.

PARTICIPANT	ACTION—RESPONSIBILITY
Student	**1. Incident without injury:** a. Notifies Clinical Supervisor/Instructor as to what happened. b. Completes and signs the following documents within 24-48 hours of the incident/accident. (1) Radiology Department Incident Report or Unusual Occurrence Report. (2) University Injury/Incident/Hazard Report. (APPENDIX G) c. Both forms are sent to the designated University RADS faculty member and placed in the student's active clinical file. d. Makes up all missed clinical time resulting from this incident.
	2. Incident of unknowing exposure to a patient with active TB, Meningitis, Hepatitis B and/or HIV. a. As soon as student is notified of the patient's positive disease status, the student must complete and sign the following documents within 24-48 hours of the notice. (1) Radiology Department Incident Report or Unusual Occurrence Report. (2) University Injury/Incident/Hazard Report. (APPENDIX G) b. Both forms are sent to the designated University RADS faculty member and placed in the student's active clinical file. c. Student participates in all follow-up treatment along with all involved hospital personnel (i.e. TB skin test, blood sample drawn for Hepatitis titer and/or HIV testing, etc.). d. If the student is billed for the follow-up treatment, since s/he is not an employee of the clinical facility, then the student should follow items 3e,3g, 3h & 3i listed below.
	3. Incident with injury (including accidental needle stick): a. Notifies Clinical Supervisor/Instructor as to what happened. b. As needed, seeks treatment from Emergency Department (ED/ER) at clinical site, or in the Employee Health Clinic, or from personal physician, or from SIUC Student Health Center. c. Completes and signs the following documents within 24-48 hours of the incident/accident. (1) Radiology Department Incident Report or Unusual Occurrence Report. (2) University Injury/Incident/Hazard Report. (APPENDIX G) d. Both forms are sent to the designated University RADS faculty member and placed in the student's active clinical file. e. Participates in all follow-up treatment, including Hepatitis B and HIV testing.

f. If condition worsens, seeks treatment from personal physician, the Emergency Department or SIUC Student Health Center.

g. **Pays for, or arranges for payment, of all treatment** (including initial treatment and any follow-up care) from personal physician, the Emergency Department or SIUC Student Health Center.

h. Sends copy of Emergency Department itemized bill to personal insurance company and completes the appropriate accident claim forms(s) for that company, for payment or reimbursement.

i. **If SIUC Student Health Center is the student's only source of health insurance, then the student must:**

(1) Call the Student Health Programs Medical Benefits Office at (618) 453-4413 to obtain a **Claim Form**, a **Primary Insurance Information Form,** and to notify the Medical Benefits Office that a claim is being submitted. (Both forms are online at http://shc.siu.edu/insurance/ click on "Forms", then scroll down to "**Primary Insurance Information**" and "**SIUC Extended Care Plan Claim Form**").

(2) Complete and return both forms and the Emergency Department itemized bill to the Student Medical Insurance Office. **If these forms are not completed, the claim will be denied.**

(3) Mail or fax a copy of the student's Emergency Department treatment record to:

Medical Records Office
SIUC Student Health Center
374 E. Grand Ave. MC 6740
Carbondale, IL 62901

Fax # for Medical Records is 618-453-4088

j. **The student's SIUC Dawg Tag # MUST be on all paperwork sent to any office within the SIUC Student Health Center.**

k. Makes up all missed clinical time resulting from this incident.

Clinical Supervisor/Instructor

1. As needed, encourages student to receive medical treatment.
2. Signs the following document(s) within 24-48 hours of the incident/accident.
   a. Radiology Department Incident Report or Unusual Occurrence Report.
   b. University Injury/Incident/Hazard Report. (APPENDIX G)
3. Places original document(s) in student's departmental file.
4. Sends a copy of the following document(s) to the designated University RADS faculty member.
   a. Radiology Department Incident Report or Unusual Occurrence Report.
   b. University Injury/Incident/Hazard Report. (APPENDIX G)
5. Counsels and advises student on incident/accident prevention.
6. If necessary, assigns student to noncritical area.
7. Schedules make-up time as soon as possible.
8. Keeps RADS faculty informed of student status or of potential problems.

Designated RADS Faculty

1. Reviews all records.
   a. Places a copy of Incident Report/Unusual Occurrence Report in student's active clinical file.
   b. Places a copy of University Injury/Incident/Hazard Report in student's active clinical file.

2. Advises Clinical Supervisor/Instructor.
3. When necessary, advises and counsels student.
4. Makes final decisions concerning extended/prolonged absences resulting from injury.
5. Makes final decisions concerning disciplinary actions for repeated incidents or accidents.

At time of treatment, the status of the student's tetanus immunity will also be reviewed and updated as appropriate.

GRIEVANCE PROCEDURES

The following are the School of Health Sciences Southern Illinois University at Carbondale

GRADES GIVEN AT THE END OF A COURSE ARE FINAL AND MAY NOT BE CHANGED BY ADDITIONAL WORK OR BY SUBMITTING ADDITIONAL MATERIALS.

EXTENUATING CIRCUMSTANCES WHICH TRANSCEND PROFESSIONAL JUDGMENT OF THE INSTRUCTOR MAY BE APPEALED THROUGH PROCEDURES ESTABLISHED BY THE INSTRUCTOR'S SCHOOL OR COLLEGE. MATTERS RELATED TO FACULTY JUDGMENT IN GRADING MAY NOT BE APPEALED.

A matter relating to academic evaluation is the responsibility of the department responsible for the program in which it occurs and the office of the dean of the School of Health Sciences. Every effort should be made to resolve such academic evaluation problems quickly and at the program level where they occur prior to director involvement.

- Grades may be appealed only on procedural grounds and not on substantive grounds.
- Grades may not be appealed beyond the level of the dean.

Matters pertaining to evaluation of a course in which the student is or has been registered that are not resolved between the persons directly involved will be adjudicated in the following manner:

1. A student who has reason to be aggrieved will file the complaint in writing with the department chairperson responsible for the program in which the incident occurs.
    a. The complaint must be presented in sufficient detail that a proper response may be made.
    b. The complaint must be received by the department chairperson within 30 working days of the occurrence of the incident.
2. The department chairperson will submit a copy of the complaint to the other party named in the complaint within three working days.
3. The other party will respond in writing to the complaint to the department chairperson within 15 working days of receipt of the copy of the complaint.
4. The department chairperson will, within seven working days of receipt of the response to

the complaint, transmit a written decision in the matter to both parties along with notification of appellate procedures.

a. A copy of the response to the complaint will also be sent to the dean of the College.

b. Failure of either party to respond through the appropriate appellate channels within 15 working days will be interpreted as acceptance of the decision and its implementation by the appropriate office.

5. Should either party be unwilling to accept the decision of the department chairperson, an appeal may be made to the dean of the College. Such appeal must be submitted in writing within 15 working days of the receipt of the decision by the department chairperson. The appeal must specify:

    a. The original complaint;
    b. The grounds for the appeal; and
    c. Recommendation(s) for resolution of the complaint.

6. The appellant, after consultation with the dean of the College, will select one of the following procedures for adjudication:

    a. **Administrative**: The dean of the College will review the matter with each of the parties involved and render a decision in writing within 30 working days of the review.

    b. **Panel**: The dean of the College will appoint a panel consisting of three faculty members with no administrative appointment and three students to review the matter and render a decision within 30 working days of the review. Written records of the review proceedings will be placed in the student's permanent record in the College.

7. When a decision is reached by one of the above methods, the dean of the College will notify each of the parties of the decision in writing. A copy of the decision will be filed with the student's permanent record in the College. An information copy will also be sent to the dean of the Graduate School if the matter involves a graduate student. There is no appeal for grades above the level of the college dean.

Grievance Procedure Beyond Grades

A student who believes he or she has been unreasonably denied an educational benefit due to any grievance onto themselves may petition in writing as follows:

Cases involving class attendance or class examinations that are unresolved at the class instructor level may be appealed by the student by filing a petition in writing, within thirty (30) calendar days of the incident being appealed, to the chair or coordinator of the department or program in which the course is offered. In the event the case is not resolved to the student’s satisfaction at the department/program level within five (5) working days after the chair’s receipt

of the petition, the student may petition in writing to the dean of the school or college to which that teaching department or program reports.

The student's petition to the school or college level must be filed with the dean within five (5) working days of the decision at the department level. Should the case not be resolved to the student's satisfaction at the school or college level within five (5) working days of the petition filing at that level, the student may petition the Provost.

If the student is still not satisfied at that level within the five (5) working day time period, he or she may petition to the Chancellor within another five (5) working days. Decisions of the Chancellor may be appealed to the President, and to the Board of Trustees if necessary, in accordance with Bylaws of the Board of Trustees. In cases involving admissions, *the grievance process should follow the time frames described above,* with the initial petition being filed with the Director of Admissions, which is the only filing point prior to the Provost.

Only after a student has exhausted all other prospects concerning a grievance with a JRCERT accredited program, should the student involve the JRCERT directly.

If the student wishes to contact the Joint Review Committee on Education in Radiologic Technology.

JRCERT
20 N. Wacker Drive
Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Fax: (312) 704-5304
E-mail: mail@jrcert.org

UNIVERSITY POLICY CONCERNING SEXUAL HARASSMENT

Radiography Program Policy and General Statement.

Southern Illinois University at Carbondale is committed to creating and maintaining a community in which students, faculty, and staff can work together in an atmosphere free of all forms of harassment, exploitation, or intimidation. Sexual harassment, like harassment based on race or religion, is a form of discrimination expressly prohibited by law. It is a violation of Title VII of the Federal 1964 Civil Rights Act and Title IX of the Educational Amendments of 1972 and a civil rights violation of the Illinois Human Rights Act 1992.

In addition to being illegal, sexual harassment runs counter to the objectives of the Radiologic Sciences Program. When people feel coerced, threatened, intimidated, or otherwise pressured by others into granting sexual favors, or are singled out for ridicule or abuse because of their gender, their academic and clinical performance is liable to suffer.

Sexual harassment affects a person's health through physical and emotional suffering, fear, stress, decreased self-worth, absenteeism, and diminished quality of work. Family and working relationships suffer as well. It destroys trust, reputation, safety, productivity, and morale. Sexual harassment is costly in terms of absenteeism, time, recruiting, rehiring, and retraining, and in terms of legally resolving a sexual harassment complaint.

Such actions violate the dignity of the individual and the integrity of the University as an institution of higher learning.

In particular, the Radiologic Sciences Program will not tolerate the sexual harassment or abuse of any of our students, whether the initiator is another student, patient, clinical site employee, or visitor. Any student violating this policy will be subject to disciplinary actions up to and including suspension from the program. (**APPENDIX E).**

CHAPTER 3 -- PROFESSIONAL BEHAVIOR

GENERAL STATEMENT

The professional conduct of the ideal student technologist should be such that the patient's confidence is inspired. Only a consistent professional attitude can accomplish this. One must endeavor to treat patients with kindness and courtesy and insure preservation of the patient's privacy and safety. With respect to the latter, after the patient has been placed in an exam room the door should be kept closed and care must be exercised to keep the patient covered at all times. Always introduce yourself to the patient and any additional people in the room; wear your name tag/ID badge at all times.

STEPS IN PROFESSIONAL BEHAVIOR

1. Always knock prior to entering any room.

2. Do not congregate in areas where the patients are waiting for radiographic procedures. Patients do not understand the presence of apparently idle technologists. The patient may feel he/she is being kept waiting unnecessarily.

3. Never discuss a patient's history or information on reports with them or their relatives. Patient charts and all other patient records should be kept out of the reach of unauthorized persons including patients. If they request this information, tell them it must be given to them by their physician.

4. Do not discuss matters pertaining to work in any areas where the patient may be present.

5. No conversation should take place within a patient's hearing, which is not directly intended for their ears.

6. Drinking coffee or any other beverage is prohibited around patients; it is permitted in the lounge and in designated areas of the department.

7. Gum chewing and food consumption is prohibited in the presence of patients.

8. Treat each technologist, doctor (radiologists as well as other specialists), and other health professionals with the respect due their profession. Under no circumstances are students to address members of the medical staff as anything other than "doctor" while in clinical settings.

9. Do not become involved in arguments with any member of the professional staff regarding procedures or routines of the Department of Radiology. Any differences of opinion with any doctors or health professionals should be referred immediately to the supervising technologist.

10. When answering the phone in the clinical areas, answer in the following manner: "Department of Radiology. Your name, May I help you?"

11. While walking in the hallways of the hospital, if you see a visitor who seems lost or wandering, stop and inquire if you may direct them.

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

The first-ever federal privacy standards to protect patients' medical records (including Radiology exam reports) and other health information provided to health plans, doctors, hospitals, and other health care providers took effect on April 14, 2003. Developed by the Department of Health and Human Services (HHS), these new standards provide patients with access to their medical records and more control over how their personal health information is used and disclosed. They represent a uniform, federal floor of privacy protections for consumers across the country.

HIPAA consists of five components, or rules.

- Standards for electronic health information transaction
- Mandate on providers and health plans, and timetable
- Privacy
- Pre-emption of State Law
- Penalties

Of these five rules, the Privacy Rule creates national standards to protect individuals' medical records and other personal health information (PHI).

Listed below are 18 identifiers defined by HIPAA that MUST be removed from any assignments prior to submitting the assignment.

• Patient Name	• Medical record number
• Patient address	• Health Plan beneficiary number
• Date of exam except year	• Device identifiers and their serial #'s
• Telephone number	• Vehicle identifiers and their serial #'s
• FAX number	• Biometric identifiers
• Email address	• Full face photos & other images
• URL address	• IP address
• Social Security Number	• Account numbers
• License numbers	• Any other unique identifiers

All SIUC Radiologic Sciences students are required to attend the HIPAA training classes offered by their respective clinical sites.

Further information on the HIPAA Privacy Rule is on the following website of the US Department of Health and Human Services.

www.hhs.gov/ocr/hipaa, then click on “Answers to your Frequently Asked Questions”.

SAFETY PRACTICES FOR PREGNANT RADIOGRAPHY STUDENTS

Embryonic and Fetal Effects[2]

The embryo-fetus is comprised of large numbers of rapidly dividing and radiosensitive cells. The amount and type of damage which may be induced are functions of the stage of development at which the embryo-fetus is irradiated and the absorbed dose.

Radiation received during the pre-implantation period may result in spontaneous abortion or resorption of the embryo. Radiation injury during the period of organogenesis (2 to 8 weeks) may result in developmental abnormalities. The type of abnormality will depend on the organ system under development when the radiation is delivered. Radiation to the fetus between 8 and 15 weeks after conception increases the risk of mental retardation and has more general adverse impact on intelligence and other neurological functions. The risk decreases during subsequent period of fetal growth and development and, during the third trimester, is no greater than that of adults.

Dose Limits for the Embryo-Fetus

The sensitivity of the embryo-fetus for both mental retardation and cancer should be considered in all situations involving irradiation of the embryo-fetus. Therefore, for occupational situations, NCRP Report #116 Section 10 (1993) recommends that the embryo-fetus dose should not exceed 0.5 mSv in any month; not more than 5 mSv during the entire gestational period. This is based on the philosophy that a monthly limit will control radiation exposure during potentially sensitive periods of gestation. The recommendation reflects:

1. the need to limit the total lifetime risk of leukemia and other cancers in individuals exposed in utero;
2. at doses below this limit, all deterministic effects including small head size and mental retardation are expected to be negligible; and,
3. the view of the embryo-fetus as an "involuntary visitor" brought into a radiation area as a result of the mother's occupational exposure, and therefore, is treated as a member of the general public.

It is important to realize that there is no such thing as a "radio-unique" effect. That is, a variety of other factors such as air pollution, food additives, tobacco, alcohol, drugs, and stress can all lead to the same effect to the embryo-fetus as radiation exposure.[3]

The Pregnant Diagnostic Radiography Student

The embryo-fetus is a rapidly reproducing cell system. As such, it is especially sensitive to radiation damage. The effects of radiation in utero are time related and dose dependent. These effects include prenatal death, neonatal death, and congenital abnormalities especially of the central nervous system, malignancy induction, and general impairment of growth, genetic effects and mental retardation.

Digital radiography, digital fluoroscopy, and angio-interventional procedures use high frequency generators where the radiation intensity at the tabletop can be 20 R per minute, and the radiation dose to the patient approaches 3.0 Gy. As such, the scatter radiation has a greater intensity than that produced during routine fluoroscopy.

Similarly, the pregnant student must be aware of the hazards from Nuclear Medicine examinations. For example, radioiodine is known to concentrate in the thyroid gland. The fetal thyroid gland begins functioning at 10 weeks gestation. Radioiodine readily crosses the placenta, enters fetal circulation and concentrates in the fetal thyroid gland, thus impairing the growth and function of this vital organ. The pregnant Radiologic Sciences student must use extreme caution when working with Nuclear Medicine patients to reduce her chances of absorbing minute amounts of radioiodine and/or other radioactive substances.

Objective 5.1, of the "Standards for an Accredited Educational Program in Radiologic Sciences" of the Joint Review Committee on Education in Radiologic Technology (JRCERT) states "…has a published pregnancy policy that is applicable with federal regulatory and state laws made known to accepted and enrolled female students." In order to comply with Objective 5.1, the SIUC Radiologic Sciences Diagnostic Radiography faculty in conjunction with the Radiologic Science Advisory Committee believes it is the responsibility of the pregnant Radiologic Sciences student to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of her pregnancy and estimated date of the baby's birth (delivery).

Formal, voluntary notification (declaration of pregnancy) is the only means by which the clinical facility and the SIUC Radiologic Sciences program can ensure that the dose to the embryo-fetus is limited during the pregnancy. In the absence of the voluntary, written disclosure, a student cannot be considered pregnant. (This policy of voluntary notification is based on U.S. Nuclear Commission Regulatory Guide 8.13, Revision 3, June 1999, "Instruction Concerning Prenatal Radiation Exposure").

The total dose limit to the embryo-fetus, during pregnancy is 5 mSv. Once the pregnancy is declared, the fetal exposure must not exceed 0.5 mSv per month, as monitored by a "Baby" dosimeter, and worn at waist level beneath a lead apron.

To comply with this embryo-fetus dose limit, the pregnant Radiologic Sciences student has the option to:

1. Continue her clinical and didactic education without modification or interruption. The student accepts full responsibility for her own actions and the health of her baby. Furthermore, the student absolves from liability her Clinical site and its Radiology staff, the SIUC Radiologic Sciences program and its faculty, and SIUC, from all complications that may occur during fetal growth, the birth, and the postnatal development of her baby.

2. Continue her clinical and didactic education with some modification of her clinical assignments. The pregnant student will not participate in C-Arm procedures, angiography, Nuclear Medicine exams, and high-dose rate brachy-therapy rotations. A grade of incomplete "INC" will be given until the student has completed all clinical education missed during the pregnancy. The completion of the "INC" may delay the student's sitting for the ARRT Radiography Exam, or any of its Advanced Exams.

3. Take a leave of absence from the clinical assignments during her pregnancy. A grade of incomplete "INC" will be given until the student has completed all clinical and didactic education missed during the pregnancy. The completion of the "INC" may delay the student's sitting for the ARRT Radiography Exam, or any of its Advanced Exams.

4. Take a leave of absence from the Radiologic Sciences program. If the student notifies the Program Director of her desire to return, she will be offered a position in the next class, in the following year.

A pregnancy policy, for Diagnostic Radiography students enrolled in the Southern Illinois University at Carbondale, School of Health Sciences, Radiologic Sciences program, has been developed and is in **APPENDIX I.** Students are required to read this policy, sign and date the Policy, and return it to University faculty within the first two weeks of each clinical semester.

The Radiologic Sciences student has the option to withdraw a previous declaration of pregnancy. It is her responsibility to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of the change in declaration.

Additionally, the student must return the previously acquired “Baby” dosimeter for proper processing, and for the closing of the “Baby’s” dosimeter record

[2] NCRP Report #105, Section 3.5, 1989.

CHAPTER 4 -- CLINICAL EDUCATION

CLINICAL EDUCATION

The clinical education received in this program provides the student with the necessary clinical background in the manipulation of equipment, the handling of all types of patients, the setting of proper radiographic techniques, image processing, and filing skills. All areas of these basic skills must be mastered before the student can successfully complete the program and be eligible to be certified by the American Registry of Radiologic Technologists and licensed by the Illinois Emergency Management Association (formerly the Illinois Department of Nuclear Safety).

During the two-year training/education program, the student must rotate through the following clinical assignments for the length of time prescribed by the Program Director, Clinical Coordinator and/or Clinical Instructors:

1. Rotations through affiliate hospitals
2. Processing procedures
3. Front desk
4. Diagnostic Radiologic Procedures (IVPs, BEs, GIs, routine examinations, etc.)
5. Portable Radiography
6. Surgery
7. Cardiac Cath Lab
8. Computed Tomography
9. MRI
10. Radiation Therapy
11. Ultrasonography
12. Nuclear Medicine
13. Angiography-Interventional Procedures
14. Special Procedures in Radiography

Clinical Hours

Each SIUC Radiography student will be at his/her hospital/clinical site, 37 hours/week, excluding lunch, and excluding University recognized holidays.

- Federal holidays may not be used as clinical make-up days.
- The student may be assigned to a particular X-ray room on a rotating weekly basis, where she/he is expected to participate in all the imaging exams performed in that room.
- The student may be assigned to a particular X-ray room on a rotating daily basis, where she/he is expected to participate in all the imaging exams performed in that room.
- As the semester progresses, the student may find himself/herself assigned to work with the RTs who perform mobile imaging in the Emergency Department and/or in the patient's hospital room.
- If the student's hospital/clinical site has a dedicated radiography room built into the Emergency Department, then she/he may find himself/herself assigned to work with the ER/ED RTs.

- If the student's hospital/clinical site has a dedicated radiography room built into the Out-Patient Department, then the student may find himself/herself assigned to work with the Out-Patient RTs.
- Rotating to the Operating Room/Surgery and/or to Evening shift is at the discretion of the student's Clinical Instructor.

A certain number of clinical hours are required for each clinical semester. These are cumulative hours and if a student does not complete these hours during the allotted time she/he may be put on Radiologic Sciences Program probation with the possibility of dismissal from the Program. Individual consideration will be given to the student with a valid excuse after consultation with the Clinical Instructor and designated SIUC faculty.

Student Evaluation of Clinical Experience

At the end of each clinical semester, the student is required to complete an evaluation of the respective clinical experience via SurveyMonkey. This is an opportunity for the student to provide an evaluation of her/his clinical experiences. Through candid evaluations, the faculty can identify the strengths and weaknesses of a particular clinical affiliate and utilize this information for continuing program evaluation. Another area where this information is useful is in matching student's clinical experience weaknesses with affiliates that rate high in providing clinical experiences that address a student's weaknesses.

CLINICAL EDUCATION REQUIREMENTS

Clinical Education Requirements are designed to help the student learn to adjust to the policies and procedure of the professional work force.

Rules

1. Prompt attendance in all clinical assignments must be maintained.
2. The student must rotate through all clinical assignments and gain working knowledge of the equipment and procedures performed.
3. If time is missed from clinic, the student must have all time made up **before the beginning of the next semester**. If a prolonged illness or injury occurs which would not allow a student to make up the time prior to the beginning of the next semester, the make-up time will be left to the discretion of the Program Clinical Coordinator. However, all missed time will be made up before graduation.
4. The student must satisfactorily complete all clinic competency objectives on or before the required deadlines set each semester.
5. The required number of clinical evaluations, time sheets, exams completed and the clinical objectives must be turned in by the deadline date of each semester.

6. The student must satisfactorily complete rotations through the Advanced Modality areas such as (but not limited to) Special Procedures, Emergency Room, Computed Tomography, Portable Radiography, and Surgery.

7. The student must maintain **satisfactory clinical evaluations** (**80% or above**) completed by staff technologists and clinical instructors.

8. The student must satisfactorily handle emergency room patients and produce diagnostically acceptable images within the specified time as designed by the program.

9. The students must demonstrate compassion and professional conduct at all times while working with patients.

10. The student must communicate properly with patients, using both proper medical terminology and plain English as necessary.

11. The student must be able to effectively communicate and work with fellow students, technologists, and medical staff.

12. Professional conduct and dress will be exhibited by the student at all times while assigned to the clinical area.

13. The student must complete, and preferably exceed, the required competencies within the specified time and is expected to retain proficiency.

14. Students will not be permitted in the clinical area except during their scheduled hours. This means students are not to attend clinical during their time off unless approved by their Clinical Instructor.

Any infraction of the above rules will result in the necessary disciplinary actions. The student must display professional behavior at all times. Each student must remember that the SIUC Student Conduct Code applies to their behavior both on campus **and** at the off-campus clinical internship site. Related details are at http://srr.siu.edu .

CLINICAL RADIATION PROTECTION

Policy

The following safety rules have been established for the protection of the patient, other personnel and you from ionizing radiation during your clinical education. These rules are a combination of state and federal regulations and/or laws and additional guidelines condensed from man's 100+ years' experience with ionizing radiation. These rules are mandatory and any exception must be reported to the Clinical Instructor and Clinical Coordinator as soon as possible.

Procedure

1. Regarding dosimeters:
   a. A dosimeter, properly placed at collar level, must be worn at **ALL** times during clinical education semesters.
   b. When protective aprons are used, the dosimeter must be placed above the apron, at collar level (level of student's clavicle).
   c. Dosimeters are changed every 60 days.
   d. Dosimeters & holders will be turned in every semester.
   e. If your dosimeter goes through the wash, please contact your Clinical Coordinator.
2. When an X-ray exposure is about to be made, you **MUST**:
   a. Leave the room, or
   b. Get behind the lead-lined wall of the control booth, or
   c. Be otherwise suitably protected during surgery, portable and fluoroscopic work.
3. If possible, **you should not hold or support a patient during exposure, or hold or support the IR during exposure**.
4. You may not observe the patient during exposure from an adjacent room or hall unless through a lead-glass protective window.
5. During an exposure or procedure, do not place yourself in direct line with the central ray, even though you are wearing a lead apron.
6. Under no circumstances will you permit yourself or any other human being to serve as "patient" for test exposures or experimentation.
7. If, during fluoroscopic procedures, you remain in the radiographic room the following will prevail:
   a. A lead apron must be worn at all times or you must remain behind an adequate lead protective screen and not in visible line with either tube or patient.
   b. The dosimeter must be worn above lead apron, at the level of the clavicle.
   c. You must stand as far from the patient and tube as possible, consistent with the conduct of the examination.
   d. When practical, stand behind the Radiologist.
   e. You must wear lead gloves if your proximity to the patient dictates their use.
8. When observing radiographic procedures in surgery and bedside portables:
   a. A lead apron must be worn.
   b. A dosimeter must be worn above the lead apron, at the level of the clavicle.

c. Stand as far from the patient and tube as practical.

d. Stand so that the central ray is pointing away from your body.

e. Observe all regulations which apply to work in surgery, such as preserving sterile fields, wearing surgical garments, etc. The staff technologist should be in the room during actual exposure.

f. In addition, when observing, you must step outside the room if you cannot stand at least 10 feet from the patient or stand behind the staff technologist during the actual exposure.

STUDENT SUPERVISION

Policy on Supervision of Diagnostic Radiography Students

1. Students must have adequate and proper supervision during all clinical assignments, which includes **direct supervision until competency is achieved.** The following conditions constitute direct supervision:

    a. A qualified registered radiologic technologist reviews the request for the radiographic examination (1) to determine the **capability of the student** to perform the examination with reasonable success; or (2) to determine if the **condition of the patient** contraindicates performance of the examination by the student.

    b. If either of the above determinations is questionable or negative, a qualified radiologic technologist should be present in the radiographic room.

    c. The qualified registered radiologic technologist checks and approves the images prior to the dismissal of the patient. Medical judgment may supersede this provision.

2. After a student has demonstrated competency on an imaging procedure, the student may be under **indirect supervision** of a registered radiologic technologist on the premises, in the vicinity of the radiographic area and available for immediate assistance to the students.

3. The student will be under **direct supervision when making a repeat radiographic image** during **100%** of clinical training.

4. The student will be under direct supervision in the Operating Room, Angiographic Facility, CT, MRI, Nuclear Medicine, Radiation Therapy, Sonography departments, with traumatic patients in the Emergency Room, and performing Portable exams during **100%** of clinical training.

5. The Policy on Supervision of Diagnostic Radiography Students is posted at all clinic sites so all technologists are aware.

6. The Policy on Supervision of Diagnostic Radiography is mentioned during the Advisory Meeting annually.

7. The Clinical Supervisors and Clinical Instructors will be sent an email of the supervision policy at the beginning of each semester.

CLINIC ROTATION ASSIGNMENTS

There are two clinic rotations throughout the diagnostic radiography portion of the Radiologic Sciences program. Assignments to the clinical sites for each rotation will be made by the Program Clinical Coordinator and the Program Director.

Each student is required to rotate through a minimum of two major clinic sites throughout the diagnostic radiography portion of the SIUC Radiologic Sciences program. Clinical rotations for students are based on a Lottery System. The student provides the Program Clinical Coordinator with a list of clinical sites he/she would like to attend and a lottery is then held. There are no exceptions to this process. Failure to do so may jeopardize the student's opportunity to sit for the national Registry exam.

Additionally, minor rotations are required during the second clinic semester for the areas of Radiation Therapy, Computed Tomography, and Magnetic Resonance Imaging. These minor rotations may require some additional travel from the student's assigned clinical site.

In order to provide the student with a satisfactory clinical experience, the Radiologic Sciences program strongly discourages placing a student at a clinical site where a member of the student's immediate family is employed in the Radiology Department.

EACH STUDENT <u>MUST</u> DEMONSTRATE PROOF OF PERSONAL HEALTH/MEDICAL INSURANCE PRIOR TO ATTENDING EACH CLINICAL ROTATION.

HOUSING CONSIDERATIONS

The Radiologic Sciences students who are "off-campus" during their clinic rotations have several decisions to consider regarding housing:

<u>Housing Arrangements</u>:

1. If the student lives in University approved housing during "on-campus" semesters, then she/he must contact the Radiography Clinical Coordinator for the Program specific memo "Intent to Vacate University Housing."
2. The student must submit to the Housing Contract Supervisor a completed copy of the "Intent to Vacate University Housing" memo developed by the Radiologic Sciences Program for the purpose of vacating University housing.
3. The student must follow the instructions for vacating University Housing so that she/he is not assessed any additional charges.

<u>Off-Campus Housing Arrangements</u>:

In a very limited capacity, the Radiologic Sciences staff may assist the student with off-campus housing where possible. Information about housing is provided for convenience, but the SIUC Radiologic Sciences Program does not accept responsibility for the nature, condition, or

location of housing facilities. None of the facilities/properties have been examined or approved by Program/University personnel.

Neither Southern Illinois University Carbondale nor any of its faculty, agents, or employees assume responsibility for a lease or rental agreements and cannot be held liable for nonpayment or damages.

Ultimately, the SIUC Radiography student is responsible for his/her own arrangements while at a clinical site.

HOSPITAL POLICY MANUAL

At each clinical site, the student is required to read the Hospital Policy Manual during the first two weeks of the rotation. The Hospital Policy Manual Form must be signed and returned to the Radiologic Sciences faculty to be placed in your file. This form is in **APPENDIX M-RAD 222, and APPENDIX N-RAD 332.**

Students have the right to submit allegations against a JRCERT-accredited program if there is reason to believe that the program has acted contrary to JRCERT accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.

If the student wishes to contact the Joint Review Committee Education in Radiologic Technology (JRCERT) regarding a situation, he/she may do so with the following information:

JRCERT
20 N. Wacker Drive
Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Fax: (312) 704-5304
E-mail: mail@jrcert.org

CLINICAL COMPETENCY--BASED TESTING

Clinical Competency Testing is an evaluative measure designed to insure that students can perform designated exam objectives. Their performance is documented.

Students will be given opportunity to practice, with some limitations, procedures in the energized lab before actual performance in the clinic. Each semester clinical objectives are based on previous semester's Anatomy and Positioning course work and laboratory practice. The objectives will allow an observation and assistance time frame whereby the student has opportunity to become familiarized with the hospital's routine, techniques, and simply working in an actual setting. This time allotment or time frame is frequently the first week of the clinical semester. The student will be expected to perform an exam from the designated category on a random basis of patient selection at the completion of the specified observation and assistance time allotment. The competency exam evaluation may be performed by a Clinical Instructor, his/her designee or a University RADS faculty member when available, utilizing the clinical Radiographic Evaluation Form (**APPENDIX O**). If the student fails a competency test, he or she must repeat the **entire** exam (test) a second time, on a different patient, until the student passes the competency exam (test). All competency test grades will be counted toward the final semester grade.

During the course of a clinical competency exam, when one or more images must be repeated, the supervising Radiographer has the responsibility to:

- state the reason(s) for repeating each image on the student's Competency form;
- discuss all images with the student;
- discuss the rationale for repeating one or more images; and,
- discuss the method for correcting identified errors, prior to re-exposing the patient.

When one or more images must be repeated, a qualified Radiographer must directly supervise the repeated exposures, and note the quality of the repeated images on the student's Competency form.

If it is necessary to repeat one or more of the repeated images, then the student fails the Competency exam, and the supervising Radiographer must step in to take over the exam.

CHAPTER 5 -- CLINICAL POLICIES

EMPLOYMENT

Due to the concentrated and intensified nature of the Radiologic Sciences Program, full-time employment is not recommended. If a student must accept employment, this implies that the student will:

1. Not function under the job description of a Radiologic Technologist.
   a. In Illinois, it's illegal to hire a Radiologic Sciences student to work as an unregistered radiologic technologist.
   b. When caught by the Illinois Emergency Management Agency (IEMA), both the facility and student will be fined in excess of $5,000 each, and the student will be expelled from the program.
2. Not use the abbreviation "R.T. Intern" after his/her name for any purpose.
3. Not accept employment hours which conflict with class/clinical time. Students will be counseled not to work if grades warrant concern.
4. Not work more than 20-25 hours per week.

Markers: Right and left lead markers are purchased by the student. They are to be used on every exam you perform. Should you lose one or both, you are responsible for replacing them.

Dosimeters: Dosimeters will be provided by the University. These are to be worn at collar level at all times. If the dosimeter is left at home, you are to leave clinic to get it. This time must be made up. All dosimeter reports are kept at SIUC. Each past month's report will be posted in the faculty office. The previous monthly reports are kept on file. If a dosimeter is lost, it will cost the student $10.00 to replace the dosimeter and holder.

Exposure Limitations: Any radiation exposure above 1.25 mSv [3] in a 60-day period will trigger an investigation and require the student to provide University faculty with a written report, explaining how such a dose occurred. It may be necessary for the student to meet with the University Radiation Safety Officer (RSO) and Program faculty to determine further clinical progress.

The Radiation Control Office which monitors all dosimeters and notifies the Radiography Program Director (PD) in the event of an abnormal dosimeter reading. At the request of the Program Director the RSO sends a copy of the dosimeter report to the PD who posts the report to the respective students on D2L.

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[3] CEHS Radiation Safety Manual (2007). Section 10.2, page 48; Section 16.4, page 73.

REMEMBER:

For occupational radiation workers, NCRP Report #116 (1993) recommends:

1. Annual effective dose equivalent limit of 50 mSv.
2. Cumulative (lifetime) effective dose limit of 10 mSv X age in years
3. Dose equivalent limits for tissue and organs:
   a. lens of eye 150 mSv
   b. all others (skin, hands, etc) 500 mSv

For education and training purposes, in which the student/trainee is under the age of 18 years, NCRP Report #116 (1993) recommends:

1. Annual effective dose equivalent limit of 1 mSv
2. Dose equivalent limits for tissues and organs:
   a. lens of eye 15 mSv
   b. all others (skin, hands, etc) 50 mSv

The dosimeter records the amount of radiation the wearer receives in a 60-day period. The dosimeter does not shield a person from radiation exposure, like a lead apron.

To protect promote personal radiation safety, your annual effective dose limit should be kept as low as reasonably achievable.

CLINICAL RECORDS

All students will be given the appropriate clinical forms before each clinical rotation begins. These are intended to give the student, the Clinical Instructor, and University staff an indication of the types of exams in which the student is gaining experience.

Clinical Time Sheet. The Radiologic Sciences Program Attendance Policy requires all students to be on-site Monday through Friday or Monday through Thursday, during day-shift hours, thirty-seven hours/week, for the entire semester. When arriving at the clinical site, the student is required to go to the appropriate Clinical Instructor to write in the arrival time. The Clinical Instructor will initial the arrival time. All late arrivals must be called in (within the first 10 minutes of the start of the dayshift) to the appropriate Clinical Instructor, and **MUST** be made up. All absences must be called in (within the first 30 minutes of the start of the dayshift) to the appropriate Clinical Instructor, and **MUST** be made up.

All Clinical Instructors have the appropriate attendance sheets and they are responsible to record a student's absence, tardiness, etc. It is advisable for students to periodically check with the Clinical Instructor concerning days missed, etc. An attendance sheet must be turned in at the end of the semester by the clinical instructor from each hospital. The sheet must be **signed by the Clinical Instructor**. The attendance sheet turned in at the end of each semester represents the official record of each student's time in the clinical environment.

Competency Exams (Radiographic Exam Evaluation Form). Each semester's clinical objectives are based on previous semesters' Anatomy and Positioning course work and laboratory practice. The objectives allow an observation and assistance time frame whereby the student has opportunity to become familiar with the hospital's imaging routine, radiation exposure techniques, and simply working in that clinical setting. The student will be expected to perform exams from the designated category on a random basis of patient selection at the completion of the specified observation and assistance time allotment.

The Competency Exam evaluation may be performed by a Clinical Instructor, his/her designee, or an ARRT registered radiographer utilizing the radiographic exam evaluation form and the hospital's imaging routine for that exam. On the reverse side of each Competency Exam (Radiographic Exam Evaluation) form is a listing of the basic criteria to be used to evaluate each Competency exam.

If the student fails even one position of the competency test, he or she must retest on the entire exam until the student has passed the competency test. All graded Competency Exams will be counted toward the final grade.

Monthly Attitude & Performance Evaluation (Behavior Evaluation). The Behavior Evaluations provide periodic documentation of each student's personal and professional growth throughout the clinical semester. It takes the form of a 12-item multiple choice questionnaire with space for the evaluator's comments. Ideally, the radiographer (RT) that has worked the most with a student, in a 4-5 week time period, should be the person to complete the Behavior Evaluation, with input from the Clinical Instructor/Clinical Supervisor.

A professional growth pattern of Fair-Good (1st Evaluation) to Better (2nd Evaluation), to Best or something similar (3rd Evaluation) over the course of the semester is necessary.

MAGNETIC RESONANCE (MR) SAFETY SCREENING PROTOCOL

Magnetic resonance imaging, or MRI, is a way of obtaining very detailed images of organs and tissues throughout the body without the need for x-rays or "ionizing" radiation. Instead, MRI uses a powerful magnetic field, radio waves, rapidly changing magnetic fields, and a computer to create images that show whether or not there is an injury, disease process, or abnormal condition present. For the MRI procedure, the patient is placed inside the MR scanner—typically a large, tunnel or doughnut-shaped device that is open at both ends. The powerful magnetic field aligns protons that are present in most of the body's tissues. The applied radio waves then cause these protons to produce signals that are picked up by a radio frequency receiver (RF receiver) within the MR scanner. The signals are characterized using the rapidly changing magnetic field, and, with the help of computer processing, very clear images of tissues are created as "slices" that can be viewed in any orientation.

The powerful magnetic field of the MR system will attract iron-containing (also known as ferromagnetic) objects and may cause them to move suddenly and with great force. This poses a possible risk to the patient or anyone in an object's "flight path." Great care is taken to be certain that objects such as ferromagnetic screwdrivers and oxygen tanks are not brought into the MR system area.

In a similar manner, smaller iron-containing objects such as certain medication pumps, medication patches, or aneurysm clips may move suddenly and with great force, when in the presence of powerful magnetic fields of an active MRI scanner. Such forceful motion may damage the device, cause the device to malfunction or cause personal injury.

All MRI departments are divided into Safety Zones what have been defined by the American College of Radiology (ACR). The Safety Zones are as follows:

- **Zone I** includes areas freely accessible to general public without supervision.
  - ✓ Area of no supervision
- **Zone II** includes the area between Zone I (no supervision) and Zone III (controlled zone)
  - ✓ Patient screening and preparation
- **Zone III** includes the area near the magnet room and is a controlled area
  - ✓ Controlled area where magnets could be hazardous to unscreened patients/personnel
- **Zone IV** is in the MRI magnetic room.
  - ✓ Controlled area and highest magnet field with greatest risk of harm

Every MRI facility has a comprehensive patient screening procedure and protocol that, when carefully followed, ensures that the MRI technologist and radiologist knows about the presence of metallic implants and materials so that special patient imaging precautions can be taken. For example:

- Due to the presence of an unacceptable implant or device, the exam may be canceled.
- The MRI exam will not be performed if a ferromagnetic aneurysm clip is present because there is a risk of the clip moving or being dislodged.
- Certain medical implants can heat substantially during the MRI examination as a result of the radiofrequency energy that is used for the procedure.

Before an MRI exam, the patient is asked to fill out a screening form asking about anything that might create a health risk or interfere with imaging. Items that may create a health hazard or other problem during an MRI exam include:

- Cardiac pacemaker or implantable defibrillator;
- Catheter that has metal components that may pose a risk of a burn injury;
- A ferromagnetic metal vascular clip placed to prevent bleeding from an intracranial aneurysm;
- An implanted or external medication pump (such as that used to deliver insulin or a pain-relieving drug);
- A cochlear (inner ear) implant;
- A neurostimulation system;
- A catheter that has metallic components that may pose a risk of a burn injury.

Objects that may interfere with image quality if close to the area being scanned include:

- Metallic spinal rod
- Metallic microfibers (threads) imbedded in the fabric of athletic clothing
- Plates, pins, screws, or metal mesh used to repair a bone or joint
- Joint replacement or prosthesis
- Metallic jewelry including those used for body piercing
- Some tattoos or tattooed eyeliner (these alter MR images, and there is a chance of skin irritation or swelling; black and blue pigments are the most troublesome)
- Makeup, nail polish or other cosmetic that contains metal
- Bullet, shrapnel, or other type of metal fragment from a previous injury
- Metallic foreign body within or near the eye (such an object generally can be seen on an x-ray; metal workers are most likely to have this problem)

- a bullet or other metallic fragment in your body (e.g., any metallic foreign body) there is a potential risk that it could change position, possibly causing personal injury.
- Dental fillings (while usually unaffected by the magnetic field, they may distort images of the facial area or brain; the same is true for orthodontic braces and retainers)

As an SIUC Radiologic Sciences student, you may have an occasion to assist with moving a patient into or out of the MRI scanner, it is vital that you remove all metallic objects in advance of entering the MRI scanning room, including watches, jewelry, and items of clothing that have metallic threads or fasteners. Items that need to be removed by SIUC Radiologic students before entering the MR system room include, and are not limited to:

- Purse, wallet, money clip, credit cards, cards with magnetic strips;
- Electronic devices such as beepers or cell phones;
- Hearing aids; dosimeter holder;
- Metal jewelry, watches , safety pins;
- Pens, metal spiral notebook, paper clips, keys, coins; and,
- Hair barrettes, hairpins, Program name pin.
- Metallic microfibers (threads) imbedded in the fabric of a T-shirt.

Removal of these items is for the safety of yourself, the patient, and the Imaging personnel around you.

Additionally, if an SIUC Radiologic Sciences student has on, or within his/her body, any of the previously listed hazardous or interfering devices, then the Radiologic Sciences faculty have developed an MRI Safety Screening Protocol form, located on page 86. This form and the content of the previous pages is to provide appropriate safety information pertaining to magnetic fields and radiofrequency hazards.

While assisting in the MR environment, should an SIUC Radiologic Sciences student feel any intolerable pulling, unnatural heat or burning sensation within himself/herself then the student must leave the MR environment as quickly as possible, to prevent personal injury.

During each clinical orientation, the radiologic student will need to fill out the MRI Safety Screening Form and sign the form BEFORE attending the respective clinical semester.

CHAPTER 6 — CLINICAL COURSEWORK

GUIDELINES – Radiography Clinic 1 (RAD 222)

RAD 222. This is the first clinical assignment in the diagnostic radiography portion of the Radiologic Sciences program sequence. During this time you will become acquainted with the hospital and the radiology department structure and personnel. In addition, you will begin radiography of the patient. The emphasis will be on your experiences and demonstrated competency on the examinations listed in the clinical objectives.

You will be tested by the Clinical Instructor, or a qualified staff radiologic technologist, as to your knowledge of the hospital, department and radiographic rooms. In addition, you will be competency tested on the examinations listed in **Categories 1 through 7**. You will also be evaluated on the behavioral/attitudinal traits you exhibit.

The final clinical grade in RAD 222 Radiography Clinic 1 will be determined as follows:

Competency Performance	40%	(based upon completion of a minimum of **29 exams**)
Attitudinal Performance	40%	(based upon recommended 5th, 10th, and 15th week Personal/ Professional Growth Evaluations)

Completed Hospital & Dept. Orientations
and Monthly Positioning Journal ……...10%
2 Image Critique Sessions ……. 10%

Attendance/Tardiness/Initiative Adjustment …… Added to the total weighted score.

The final clinical grade for RAD 222 is calculated as the sum of:

- the weighted Competency average;
- the weighted Performance Evaluation average;
- the weighted Orientations & Image Critiques; and monthly positioning journal
- image critique sessions
- the Attendance/Initiative adjustment.

The RAD 222 clinical grade is reflected in the following grading scale.

93 -100 = A - Exceptionally high achievement and superior initiative.
85 - 92 = B - High achievement and above average initiative.
75- 84 = C - Satisfactory achievement and average initiative.
Below 75 = F - Unsatisfactory achievement and unacceptable initiative.
Student does not progress to the next semester in the Program.

Any competency category, not having the minimal number of completed competencies carries the risk of **decreasing** the student's semester clinical grade by **one (1) letter grade**.

COURSE OBJECTIVES

1. Perform competency exams within Category 1 through 7.

2. Observe and assist with exams in the following areas:

surgery	myelography
portables	arthrography
headwork	advanced fluoro procedures

3. Identify any contrast material utilized for the appropriate radiographic examination.

4. Identify the patient preparation required for an appropriate exam.

5. Satisfactorily complete the orientation objectives in the following areas:
   a. Radiographic Room
   b. Radiology Department
   c. Hospital

6. Maintain a clinical positioning journal, listing the following items, for the examinations in the required categories:
   a. Routine projections
   b. Collimation size
   c. Routine distance and tube angle
   d. Accessory equipment

The designated SIUC faculty will use the appropriate clinical grade sheet to determine a letter grade for this semester. **APPENDIX Q** contains a sample of each of the two clinical grade sheets.

DEPARTMENT ORIENTATION OBJECTIVES (for all clinical rotations)

The student will be able to perform the following:

1. State the main purpose for each radiographic room in the department.

2. Draw an organizational chart of the radiology department personnel, in descending order of authority.

3. Identify the medical director of the department.

4. Identify the administrative technologist of the department.

5. Demonstrate the procedure utilized for processing a patient through the department, beginning with the initial paperwork and concluding with the patient-dismissal process.

6. Demonstrate the departmental patient-transportation procedure.

7. List the routine projections and sizes of image receptor for the following examinations of an adult:

a. hand	a. toes	a. S-I joints	a. chest
b. wrist	b. foot	b. sacrum	b. abdomen
c. forearm	c. ankle	c. coccyx	
d. elbow	d. lower leg	d. L spine	
e. humerus	e. knee	e. T spine	
f. shoulder	f. femur	f. C spine	
	g. hip		

HOSPITAL ORIENTATION OBJECTIVES (for **all** clinical rotations)

The student will be able to:

1. Locate:
   a. general medical patient rooms
   b. general surgical patient rooms
   c. intensive care
   d. newborn nursery. where applicable
   e. orthopedics
   f. pediatrics
   g. recovery room
   h. surgery

2. Locate the following departments and define their main purpose with 100% accuracy:
   a. administration
   b. admission office
   c. central supply
   d. emergency room
   e. laboratory
   f. personnel office
   g. pharmacy
   h. surgery
   i. respiratory therapy
   j. physical therapy

3. Describe the departmental procedure for cardiac/respiratory arrest, allergic reactions and fire drills.

GENERAL RADIOGRAPHIC ROOM ORIENTATION OBJECTIVES
(For <u>all</u> clinical rotations)

The student will be able to:

1. Locate:
   a. x-ray tube(s)
   b. collimator light control; overhead lighting controls
   c. table and wall grid, if applicable
   d. technique chart(s)
   e. comfort and immobilization devices
   f. calipers, if applicable
   g. radiation protection devices
   h. emergency equipment
   i. control panel switches and meters to include:
      (1) kilovoltage
      (2) milliamperage stations
      (3) timer
      (4) mAs
      (5) automatic exposure controls (AEC, density control, photocells)
      (6) tube control switch (if two tubes operate off one generator)
      (7) exposure and ready (rotor) switch
      (8) automatic collimation control, if applicable
   j. placement of Exposure Index Number on image

2. State:
   a. maximum kilovoltage and milliamperage possible
   b. the system for identifying exposure overload
   c. grid ratio and lines per inch for the table and wall grid
   d. the type(s) of grid (focused or linear)

3. Demonstrate:
   a. Vertical movement of the tube and table.
   b. Horizontal movement of the tube and table

   c. Alignment of the tube and bucky for:
      (1) 5° cephalic angulation
      (2) 10° caudal angulation
      (3) 45° caudal angulation

4. Locate routine supplies (linen, bedpans, and urinals).

RADIOGRAPHIC COMPETENCIES

Following an observation and practice period, the student will be able to perform specific Mandatory and Elective imaging examinations. On the student's 6-page RAD 222/RAD 332 Competency Check List (**Appendix O**). The exams listed in each category that are denoted with an **M** are **mandatory** core clinical competencies that individuals must demonstrate to establish eligibility for ARRT certification.

Competency testing may begin at any time during the semester, provided the student has had adequate opportunity to practice the designated exams and feels competent to complete them. He or she must check with the Clinical Instructor or qualified technologist before attempting a competency test and the Clinical Instructor or qualified technologist must observe the examination.

After a student has completed a competency examination, the Clinical Instructor will review it or a qualified technologist and an evaluation will be completed for each projection using the radiographic evaluation form.

Radiographic competencies completed will count 40 percent of the student's final grade in RAD 222 Radiography Clinic 1.

1. Category 1 (Upper Extremity; min. 5 Different Mandatory Exams)
   a. Fingers
   b. Hand
   c. Wrist
   d. Forearm
   e. Elbow
   f. Humerus
   g. Shoulder (c or s Y view)
   h. Thumb

2. Category 2 (Lower Extremity; min. 5 Different Mandatory Exams)
   a. Toe
   b. Foot
   c. Ankle
   d. Lower Leg
   e. Knee
   f. Femur
   g. Hip
   h. Trauma Hip w/cross-table lateral
   i. Calcaneus

3. Category 3 (Vertebral Column; min. 4 Different Mandatory Exams)
   a. Pelvis
   b. S-I joints
   c. Sacrum/coccyx
   d. Scoliosis Series
   e. Lumbar spine
   f. Thoracic spine
   g. Cervical spine
   h. Trauma Cervical Spine

4. Category 4 (Chest; Abdomen; min. 5 Different Mandatory Exams)
   a. Chest (Adult, routine)
      (1) Chest, age 6 years or younger
   d. UGIs
   e. Esophogram

(2) Chest, wheelchair or stretcher
(3) Geriatric Chest
b. Abdomen Series
c. IV Urography
f. Small bowel
g. Colon
h. Colon with air

5. Category 5 (Bony Thorax; min. 1 Mandatory Exams)
a. A-C Joints
b. Clavicle
c. Ribs
d. Sternum
e. Scapula
f. S-C Joints

6. Category 6 (Head work; min. 1 Different Elective Exams)
a. Skull
b. Facial bones
c. Sinuses
d. Nasal bones
e. TMJs
f. Mandible
g. Orbits

7. Category 7 (Advanced Fluoro; min. 1 Different Mandatory Exams)
a. Arteriogm/DSA
b. Arthrogram
c. Cysto/Retro Pyelgm
d. ERCP/Lithotripsy
e. Fistulogram
f. Hysterosalpingogram
g. IV Cholangiogram
i. Myelogram
j. PTC/EKG (ECG)
k. T-Tube Cholang.
l. Venogram
m. VCU
n. Portables/Recovery
(1) Head work
(2) Spine work
(3) Extremities
(4) Abdomen
(5) Chest
o. Surgery Portable
(1) Fx Reductions
(2) Laminectomy
(3) OR Cholang/Chole Lap
(4) Hip-Replacement or Nailing
(5) Pacemaker/CVP Line/Q-Port/SWAN-GANZ/ Porta Cath
p. C-Arm Work
(1) Fx Reductions
(2) Laminectomy
(3) OR Cholang/Chole Lap
(4) Hip-Replacement or Nailing
(5) Pacemaker/CVP Line/Q-Port/SWAN-GANZ/Porta Cath
(6) Declot Angiogram
(7) Colonoscopy/Endoscopy
q. Post-Mortem Exam in Morgue
r. Post-Mortem Exam in Rad/Fluoro Room
s. Kyphoplasty or Vertebroplasty in Rad/Fluoro Room

t. Bronchoscopy in Rad/Fluoro Room

EXAM SIMULATIONS FOR COMPETENCY

For the RAD 222/332 Radiography Clinics, the ARRT permits the student to ***simulate*** Competency on a total of **10 imaging exams from both the mandatory and elective categories combined.**

For a Competency simulation, the student's "patient" can be another radiography student, a staff radiographer, or a radiography mannequin designed for such purposes.
Using the hospital imaging protocol, and under the direct supervision of his/her Clinical Instructor or designee, the student performs the entire exam, but DOES NOT EXPOSE the simulated patient.

The Clinical Instructor or his/her designee uses the Radiographic Evaluation Form (**APPENDIX O**) to evaluate the student's skills for the simulated Competency.

By the last 2 weeks of the clinical semester, if no human patient comes into the Imaging department for the same exam that was simulated, then the simulated Comp counts towards the student's semester clinical grade.

When a real human patient comes into the Imaging department for an imaging exam that the student has recently simulated for Competency, then the student is expected to recomp that exam on the human patient, to demonstrate his/her ability to transfer skills from the simulation to the real patient.

- The student hands in the recomp on the human patient, and then shreds the simulated Comp.
- The recomped exam counts towards the student's semester clinical grade.

TECHNICAL COMPETENCIES – RAD 222 Radiography Clinic 1

During the course of this clinical semester, the student shall be able to:

1. Use oral and written medical communication;
2. Demonstrate knowledge of human structure, function and pathology;
3. Anticipate and provide basic patient care and comfort;
4. Apply the principles of body mechanics;
5. Perform basic mathematical functions;

6. Operate radiographic imaging equipment and accessory devices;
7. Position the patient and imaging system to perform radiographic examinations and procedures;
8. Modify standard procedures to accommodate for patient condition and other variables;
9. Determine exposure factors to obtain diagnostic quality radiographs with minimum radiation exposure;
10. Adapt exposure factors for various patient conditions, equipment, accessories, and contrast media to maintain appropriate radiographic quality;
11. Practice radiation protection for the patient, self and others;
12. Recognize emergency patient conditions and initiate first-aid and basic life-support procedures;
13. Evaluate images for appropriate positioning and image quality; and Exposure Index Number
14. Evaluate the performance of radiographic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority.

RAD 332

GUIDELINES – Radiography Clinic 2 (RAD 332)

RAD 332. This is the second clinical course of the sequence. Students are expected to demonstrate knowledge and competency of examinations in Categories 1 through 8. Special assignments in other areas of diagnostic imaging and Radiologic Sciences will be performed for three to four weeks of the semester.

GRADING and EVALUATION

The final clinical grade for RAD 332 is calculated as the sum of:

- the weighted Competency average (Mandatory, Elective & Program Required);
- the weighted Performance Evaluation average;
- the weighted Hospital & Dept. Orientations score; image critique sessions
- the weighted average on the Radiography Self-Made Study Guides; and,
- any adjustment for Attendance/Tardiness, et,

Competency Performance	35%	(based upon completion of at least 14 different exams)
Attitudinal Performance	45%	(based upon 5th, 10th, & 15th week Personal/Professional Growth Evaluations)
Average grade on 4 Radiography Registry Study Guides…...	15%	Added to the total weighted score.
Image Critique Sessions and Hospital and Dept. Orientation paperwork ……	5%	Added to the total weighted score.
Attendance/Tardiness/Initiative Adjustment…		Added to the total weighted score.

By the end of the RAD 332 clinical semester, any SIUC Radiography student who does not satisfactorily complete the 39 Mandatory competency exams, and at least 25 Elective competency exams, will not be allowed to sit for the ARRT Radiography Board exam and will be dismissed from the program.

The RAD 332 clinical grade corresponds to the following grading scale.

93 -100 = A - Exceptionally high achievement and superior initiative.

85 - 92 = B - High achievement and above average initiative.

75 - 84 = C - Satisfactory achievement and average initiative.

Below 75 = F - Unsatisfactory achievement and unacceptable initiative.
Student does not progress to the next semester in the Program.

The designated SIU faculty will use the appropriate clinical grade sheet to determine a letter grade for this semester. (**APPENDIX Q**)

COURSE OBJECTIVES

1. Perform competency exams within Category 1 through 7, especially those Mandatory and Elective exams already Comped out.
2. Perform Mandatory competency exams within Category 1 through 7 that were not completed (Comped Out) during the Spring clinical semester.
3. Observe and assist with exams during Advanced Modality rotations (Category 8).
4. Whenever possible, observe the radiologist interpreting images.
5. Maintain a clinical positioning journal for the examinations in the required categories.
7. Identify any contrast material utilized for the appropriate examination.
8. Identify patient preparation required for appropriate exam.
9. Satisfactorily complete the orientation objectives in the following areas: (Please refer to these sections, under the guidelines for RAD 222, for the specific objectives).
   a. Radiographic Room
   b. Radiology Department
   c. Hospital

RADIOGRAPHIC COMPETENCIES

On the student's 6-page RAD 222/RAD 332 Competency Check List (**Appendix O**) are the **39 Mandatory imaging procedures/exams in which the student must demonstrate clinical competency, prior to the end of the Fall clinical semester.**

Additionally, this Competency Check List identifies the Elective imaging procedures/exams in which the student must demonstrate clinical competency, prior to the end of the Fall clinical semester. **The SIUC Radiography student must demonstrate clinical competency in at least 15 of the 60+ Elective procedures identified by the ARRT, to establish eligibility for ARRT certification.**

EXAM SIMULATIONS FOR COMPETENCY

For the RAD 222/332 Radiography Clinics, the ARRT permits the student to simulate Competency on a total of **10 imaging exams from both the mandatory and elective categories combined.**

MANDATORY ADVANCED MODALITY ROTATIONS (CATEGORY 8)

During a special assignment period, the student will observe and assist in the following program required (PR) Advanced Modalities:

1. C.T. Scanning (Computerized Tomography) 2-3 days
2. MRI (Magnetic Resonance Imaging) 2-3 days
3. Radiation Therapy if the entire class is able to attend a rotation 2 days

Optional advanced modality rotations are, but limited to Angiographic/Interventional procedures, Medical Sonography and Nuclear Medicine. These optional modality rotations are elective rotations, and will applied to the student's Elective exam needs. These elective rotations are to be one day only.

In order to receive proper Category 8 credit (that is, in order to 'comp out' in Category 8 advanced modalities) for each advanced modality rotation, the student must:

- Write out the answers to the Objectives for the desired modality by the end of the week's rotation;
- Ask the modality Clinical Supervisor/Clinical Instructor to complete the modality "Student Evaluation;" and,
- Hand in the completed modality Objectives and modality "Student Evaluation" to his/her University Clinical Coordinator, at the designated due date.

There is a Clinical Instructor for each of the advanced modalities who is responsible for insuring that students complete these objectives.

Each student is expected to spend this time, in these Advanced Modalities. Failure to complete the require hours in an Advanced Modality will have a negative effect on the student's clinical grade for the semester.

Chronic absenteeism from any Advanced Modality Rotation may result in the student being terminated from the program.

The Advanced Modality Objectives are located in **APPENDIX P.**

Early dismissal from an Advanced Modality Rotation:

If an advanced modality completes its last patient early (e.g., 12noon), and has a 'skeleton crew' in the afternoon due to equipment/scanner preventive maintenance, and the advanced modality Supervisor gives the student permission to leave that department, **then** the SIUC radiography student must return to the main Radiology department and participate in patient exams until his/her dayshift hours are complete.

Ultimately, early dismissal from an advanced modality rotation is at the discretion of the advanced modality Supervisor in conjunction with the Radiology department's dayshift Supervisor.

TECHNICAL COMPETENCIES - RAD 332 Radiography Clinic 2

During the course of this clinical semester, the student shall be able to:

1. Use oral and written medical communication;
2. Demonstrate knowledge of human structure, function and pathology;
3. Anticipate and provide basic patient care and comfort;
4. Apply the principles of body mechanics;
5. Perform basic mathematical functions;
6. Operate radiographic imaging equipment and accessory devices;
7. Position the patient and imaging system to perform radiographic examinations and procedures;
8. Modify standard procedures to accommodate for patient condition and other variables;
9. Determine exposure factors to obtain diagnostic quality radiographs with minimum radiation exposure;
10. Adapt exposure factors for various patient conditions, equipment, accessories, and contract media to maintain appropriate radiographic quality;
11. Practice radiation protection for the patient, self and others;
12. Recognize emergency patient conditions and initiate first-aid and basic life-support procedures;
13. Evaluate radiographic images for appropriate positioning and image quality;

14. Evaluate the performance of radiographic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority;

15. Demonstrate knowledge and skill relating to quality assurance; and

16. Exercise independent judgment and discretion in the technical performance of medical imaging procedures (Radiologic Sciences).

APPENDIX A

ARRT STANDARDS OF ETHICS

ASRT SCOPE OF PRACTICE FOR RADIOGRAPHY

ARRT Standards of Ethics

The *Standards of Ethics* of the ARRT apply solely to persons applying for examination and certification by ARRT (Candidates) and to persons holding current registrations by ARRT or formerly held registrations by ARRT (Registered Technologists). The *Standards of Ethics* are intended to be consistent with the mission statement of the ARRT, and to promote the goals it sets forth.

Applicants for registration by the American Registry of Radiologic Technologists (ARRT) must at the time of application and on subsequent occasions when the registration is renewed, agree to abide by the ARRT Code of Ethics. The Code of Ethics (ARRT Examinee Certification Handbook) is listed below.

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

1. The Radiologic Technologist conducts himself/herself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.
2. The Radiologic Technologist acts to advance the principle objective of the profession to provide services to humanity with full respect for the dignity of mankind.
3. The Radiologic Technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination regardless of sex, race, creed, religion, or socioeconomic status.
4. The Radiologic Technologist practices technology founded upon theoretical knowledge and concepts, utilizes equipment and accessories consistent with the purpose for which they have been designed, and employs procedures and techniques appropriately.
5. The Radiologic Technologist assesses situations, exercises care, discretion and judgement assumes responsibility for professional decisions, and acts in the best interest of the patient.
6. The Radiologic Technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment management of the patient, and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The Radiologic Technologist utilizes equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in limiting the radiation exposure to the patient, self and other members of the health care team.
8. The Radiologic Technologist practices ethical conduct appropriate to the profession, and protects the patient's right to quality Radiologic Sciences care.

9. The Radiologic Technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual or the community.

10. The Radiologic Technologist continually strives to improve knowledge and skills by participating in educational and professional activities, sharing knowledge with colleagues and investigating new and innovative aspects of professional practice. One means available to improve knowledge and skill is through professional continuing education."

The American Society of Radiologic Technologists (ASRT) Radiographer Scope of Practice

The scope of practice of the medical imaging and radiation therapy professional includes:

- Receiving, relaying and documenting verbal, written and electronic orders in the patient's medical record.
- Corroborating patient's clinical history with procedure, ensuring information is documented and available for use by a licensed independent practitioner (e.g. a licensed doctor of medicine, osteopathy, dentistry, podiatry, or chiropractic).
- Verifying informed consent.
- Assuming responsibility for patient needs during procedures.
- Preparing patients for procedures.
- Applying principles of ALARA to minimize exposure to patient, self and others.
- Performing venipuncture as prescribed by a licensed independent practitioner.
- Starting and maintaining intravenous (IV) access as prescribed by a licensed independent practitioner.
- Identifying, preparing and/or administering medications as prescribed by a licensed independent practitioner.
- Evaluating images for technical quality, ensuring proper identification is recorded.
- Identifying and managing emergency situations.
- Providing education.
- Educating and monitoring students and other health care providers.
- Performing ongoing quality assurance activities.

The scope of practice of the radiographer also includes:

1. Performing diagnostic radiographic and non-interpretive fluoroscopic procedures as prescribed by a licensed independent practitioner.
2. Determining technical exposure factors.

3. Assisting licensed independent practitioner with fluoroscopic and specialized radiologic procedures.
4. Applying the principles of patient safety during all aspects of radiographic procedures, including assisting and transporting patients.
5. Archiving data as appropriate and documenting patient radiation exposure(s).

APPENDIX B

SIUC STUDENT CONDUCT CODE
(http://srr.siu.edu/student-conduct-code)

UNIVERSITY STUDENT CONDUCT CODE

Southern Illinois University Carbondale (SIUC) is dedicated not only to learning, research, and the advancement of knowledge, but also to the development of ethical and responsible persons. The University seeks to achieve these goals through sound educational programs and policies governing conduct that encourages independence and maturity. By accepting membership in this University, an individual joins a community characterized by free expression, free inquiry, honesty, respect for others, and participation in constructive change. All rights and responsibilities exercised within this academic environment shall be compatible with these principles.

Students shall be free to examine all questions of interest to them and to express opinions. They shall be guaranteed all constitutional rights including free inquiry, expression, assembly, and disciplinary due process. All regulations shall seek the best possible reconciliation of the principles of maximum academic freedom and necessary order. Any behavior, which has been influenced by a student's use of drugs or alcohol, will not limit the student's responsibility for that behavior. **(*That is, the student is responsible for his/her behavior regardless of drug and/or alcohol use*).**

It is each student's responsibility to know and comply with the SIUC Student Conduct Code and any policies referenced therein. In addition to the Student Conduct Code, students are also subject to other policies and procedures, including but not limited to, Student Behavior: Policy and Procedures for Administrative Review, Residence Halls Guidebook, departmental policies.

These regulations shall be known as the Student Conduct Code for SIUC. The regulations contained herein are established under the authority granted by law to the Board of Trustees to establish rules and regulations for SIU and pursuant to *3.C Policies* of the Board of Trustees authorizing the Chancellor to develop regulations dealing with student rights and conduct. All students of the campus community have the responsibility to comply with these regulations. The responsibility for enforcement of the code rests with the Chancellor of SIUC.

The campus community has a responsibility to provide its members those privileges, opportunities, and protections that encourage and maintain an environment conducive to educational development. Therefore, the SIUC Student Conduct Code applies to:

1. Events and meetings sponsored by University-recognized student organizations.
2. Meetings or events when students represent the University or University-recognized organizations.

3. Off-campus housing zoned by the City of Carbondale as fraternity or sorority and displaying Greek letters or the name of the fraternal organization.
4. Practicum, internship, student field trip, student teaching, clinical settings, extension centers, residence centers, and independent study settings.
5. Other off-campus conduct that substantially interferes with the mission of the University including but not limited to, interference with the educational pursuits of its students, faculty or staff.

The University reserves the right to initiate disciplinary proceedings for violations of the Student Conduct Code where the University has jurisdiction, even when criminal charges are brought by the appropriate authority. Disciplinary actions by the University are independent of any criminal or civil proceedings.

Violations of the University Student Conduct Code are encompassed in two categories: acts of academic dishonesty and acts of social misconduct.

Acts of Academic Dishonesty

1. Knowingly furnishing false information to a University official relative to academic matters;
2. Plagiarism, representing the work of another as one's own work;
3. Preparing work for another that is to be used as that person's own work;
4. Cheating by any method or means;
5. Knowingly and willfully falsifying or manufacturing scientific or educational data,

   and representing the same data to be the result of scientific or scholarly experiment or research;
6. Soliciting, aiding, abetting, concealing, or attempting acts of academic dishonesty.

Acts of Social Misconduct There are 17 "Acts of Social Misconduct" listed in the Student Conduct Code. The "Acts" of particular importance to the Radiologic Sciences Program are noted below.

1. Violence
   a. Sexual Misconduct (includes any form of coerced or unwanted sexual activity including, but not limited to, rape or unwanted fondling or unwanted touching).
   b. Physical abuse
   c. Direct threat of violence and/or intimidation
   d. Participation in any activity to disrupt any function of the University by force or violence

e. Violent behavior representing a danger to person(s)

2. Deception—Furnishing false information to the University with intent to deceive.

3. Threats to Safety

4. Stalking
   a. A person commits stalking when he or she on at least 2 separate occasions, follows another person or places the person under surveillance, knowingly and without lawful justification; and
      (1) at any time transmits a threat to that person of immediate or further bodily harm, sexual assault, confinement, or restraint; or

      (2) places that person in reasonable apprehension of immediate or future bodily harm, sexual assault, confinement, or restraint.

   b. For the purpose of this section, a person "places a person under surveillance" by remaining present outside the person's place of residence, classroom, or other building on campus.

   c. For the purpose of this section, "follows another person" means
      (1) to move in relative proximity to a person as that person moves from place to place, or

      (2) to remain in relative proximity to a person who is stationary or whose movements are confined to a small area.

5. Disorderly Conduct: A person commits the offense of disorderly conduct when he/she knowingly does any act in such unreasonable manner as to alarm or disturb another and to provoke a breach of the peace.

Sanctions and Conditions

There are 10 "Sanctions and Conditions" listed in the Student Conduct Code. The "Sanctions" of particular importance to the Radiologic Sciences Program are noted here.

The following are sanctions which may be imposed for a violation of this Code. Conditions may accompany a sanction. Conditions include, but are not limited to, restitution of damages, work projects, required counseling or therapy, required academic performance, etc. A condition may include loss of certain University privileges. If a condition accompanies a sanction, the condition must be related to the violation.

1. Failure of an assignment, quiz, test, examination or paper: A failing grade (F) may be assigned for the work in connection with which the violation occurred.

2. Failure in a course: A failing grade (F) may be assigned for the course in which the violation occurred.

3. Disciplinary Suspension: Disciplinary suspension is an involuntary separation of the student from the University for a stated period of time not to exceed three (3) years and until an imposed condition is met. A notation is entered on the student's transcript and will remain there for the duration of the suspension. When the suspension is concluded, the notation will be removed.

4. Expulsion: A permanent involuntary separation of the student from the University.

5. Additional Sanctions Associated with Suspension or Expulsion:

    a. Students shall not be awarded degrees if, at the time of commencement, they are subject to disciplinary action or to charges under this Code that could lead to suspension or expulsion.

    b. A student separated from the University for disciplinary reasons is subject to the normal guidelines for the refund of tuition and fees, the issuance of grades, and the imposition of financial penalties for terminating a housing contract.

    c. If the conduct which led to disciplinary separation constitutes an ongoing threat to the safety of the University, its employees, or its students, the sanction may be accompanied by a condition which bars the disciplined student from University property.

The Vice Chancellor for Student Affairs and Enrollment Management, with the approval of the Chancellor, may establish a system of cost recovery measures to be assessed to students who are found in violation of the Student Conduct Code. The purpose of the cost recovery measures is to offset the costs specific to a sanction or a condition of a sanction. The cost recovery measures shall not be used as a sanction, in and of itself.

APPENDIX C

HOSPITAL ORIENTATION

DEPARTMENTAL ORIENTATION

Hospital / Department Orientations

All hospitals and clinical sites affiliated with the SIUC Radiologic Sciences Program have the ethical and professional responsibility to their employees, patients and the community to provide an environment which maintains the highest standards for safety, health and productivity.

To introduce the RADS student to the clinical setting and its standards, all our affiliated clinical facilities require each clinical internship student to participate in **a hospital orientation** per clinic site preference.

During July 2001, and based upon the "Quality of Health Care in America" project from the Institute of Medicine (IOM), the Joint Commission on Accreditation of Healthcare Organizations (the Join Commission; the organization that accredits the clinical sites affiliated with the RADS Program) published and began enforcing a broad set of standards that focused on supporting medical/healthcare error reduction programs in its accredited organizations, as well as supporting new patient safety standards.

To ensure a greater focus on safe practices, for the protection of hospital patients, employees, visitors and the community-at-large, all our clinical sites are subjecting any clinical internship student (regardless of the medical field) to the same hospital orientation procedures that new employees attend. As such they require each clinical internship student to undergo a clinical drug screening and a criminal background check as a component of his/her hospital orientation, **and** as a condition of his/her attendance at the clinical site.

Any RADS student refusing to participate in this drug screening and background check will automatically be hindered from completing the Program!

Clinical Drug Screen

The use, sale, transfer or possession of controlled substances or alcohol by clinical internship students creates a potential for harm. It also questions the qualifications of the student to be a responsible caregiver. Therefore, during the hospital orientation, each RADS student will report to the hospital's Laboratory, where a urine specimen will be collected for substance abuse screening and urinalysis.

Results of the substance abuse screening will be confidentially reported to the hospital's Occupational Health Nurse or designated medical staff. The Occupational Health Nurse/designated medical staff will notify the Clinical Liaison Coordinator or the appropriate hospital Radiology Clinical Supervisor/Instructor of the positive or negative results of the

screening. Since confirmation tests are automatically performed on all positive screening results, the RADS faculty strongly recommend that each clinical student take a list of his/her prescription medications and over-the-counter medications to the hospital orientation, to assist in the explanation of any unusual results.

If the drug screen is confirmed positive, the student will not be permitted to attend the clinical site for his/her RADS internship. Students will not be permitted to begin their clinical semester until negative drug screen results have been received.

A negative drug screen produces no additional testing. However, if during the clinical semester circumstances arise, additional testing may be conducted at that time.

Criminal Background Check

The Office of Inspector General (OIG) was established in the U.S. Department of Health and Human Services to identify and eliminate fraud, waste and abuse in the Department's programs and to promote efficiency and economy in Departmental operations. The OIG carries out this mission through a nationwide program of audits, inspections, and investigations.

Additionally, the OIG has the authority to exclude from participation in Medicare, Medicaid, Tricare, the Veterans programs, and other Federal health care programs individuals and entities who have engaged in fraud or abuse, and to impose civil money penalties (CMPs) for certain misconduct related to Federal health care programs (sections 1128 and 1128A of the Social Security Act). (http://oig.hhs.gov/faqs/exclusions-faq.asp)

The effect of an exclusion (not being able to participate) is:

- No program payment will be made for anything that an excluded person furnishes, orders or prescribes. This payment prohibition applies to the excluded person, anyone who employs or contracts with the excluded person, any hospital or other provider where the excluded person provides services, and anyone else. This exclusion applies regardless of who submits the claims and applies to all administrative and management services furnished by the excluded person.
- No federal program payment may be made to cover the excluded person's salary, expenses or fringe benefits, regardless of whether this excluded individual is providing direct patient care.

Civil money penalties of $10,000 for each item or service furnished by the excluded individual may be imposed by the OIG and the responsible party may have to pay three times the amount claimed for each item or service. Situations that could expose excluded persons and their employers to civil money penalties include (and are not limited to):

- Services performed by excluded nurses, technicians (radiographers, and advanced modality practitioners) or other excluded individuals who work for a hospital, nursing home, home health agency or physician practice, where such services are related to administrative duties, preparation of surgical trays or treatment plan reviews if such services are reimbursed, directly or indirectly, by a federal health care program, even if the individuals do not furnish direct care to federal program beneficiaries.
- Services performed by excluded pharmacists or other excluded individuals who input prescription information (contrast agent information) for pharmacy billing or who are involved in any way in filling prescriptions for drugs reimbursed, directly or indirectly, by a federal health care program.

If the former employer, of an SIUC Radiologic Sciences student, was convicted of Medicare fraud, Medicaid fraud and/or convicted of defrauding any other Federal health care program, then the student may also be listed in the conviction statement as well as being listed on the List of Excluded Individuals/Entities

Once the specified period of exclusion ends, reinstatement of excluded entities and persons is not automatic.

> For example: the previously excluded SIUC Radiologic Sciences student must apply for reinstatement and receive authorized notice from the OIG that reinstatement has been granted.

Please note: any previously excluded SIUC Radiologic Sciences student who does not apply for reinstatement may be disqualified from sitting for the ARRT Registry exam in radiography and the advanced modalities.

Students who have been criminally convicted of certain misdemeanors and/or felonies create a potential for harm. They may also be disqualified from sitting for the ARRT Registry exam in radiography and the advanced modalities.

APPENDIX D

CLINICAL GRIEVANCE PROCEDURES

APPENDIX D: CLINICAL GRIEVANCE PROCEDURES

Grievance Procedures

We realize that problems may occur during your education in our Radiologic Sciences program. We want to help you solve these problems, but can only do so if we are made aware of them.

Any problems incurred in the clinical facility should first be brought to the attention of the appropriate Clinical Instructor. The procedure for resolving a problem at a clinical facility is listed in the section "Student Grievance Appeals".

Any problems dealing with the program as a whole, whether with your classes at SIUC or problems that cannot be resolved to your satisfaction please refer to page 30 in this handbook and the “Student Academic Grievance Procedures”.

UNSATISFACTORY CLINICAL PROGRESS

Clinical Probation

Determination of unsatisfactory performance in the clinical area will be based on clinical objectives, clinical observations, image critique sessions, a student's professionalism and the ability to follow college and hospital policy based on safe and competent practice.

A conference will be held for failure(s) to transfer classroom knowledge to clinical training; for failure(s) to adhere to hospital, college or program policy; or for failure(s) to follow generally accepted rules of personal cleanliness, professional ethics and conduct, academic failure, and for failure to demonstrate knowledge, skill and judgment at the expected level. The Clinical Coordinator and Clinical Supervisor will confer with the student and discuss the reasons for, and means of, correcting the cause for the conference.

A remediation plan will be drawn up for discussing/documenting the cause of the Radiologic Sciences program probation, the terms of the probation and the length of time identified for improvement and reevaluating. The student will receive the original copy and a copy will be placed in her/his personal file. The situation and remediation plan will be discussed between the Clinical Supervisor, and the student.

If a student receives an unsatisfactory clinical performance evaluation, the student may be placed on probation for the remainder of the semester. Failure to show satisfactory improvement and/or comply with remediation will result in dismissal from the Program. The final decision for student dismissal will be made by the Radiography Program Director after consultation with the appropriate RADS faculty member and Clinical Supervisor/Instructor.

Clinical Suspension

If a situation arises that requires immediate and effective discipline, where extremely serious infractions of rules have occurred, then the student will be placed on suspension from the clinical setting pending a full investigation of the situation. Examples of actions that may lead to immediate suspension and possible dismissal include (but are not limited to):

1. A student behavior that constitutes a real or potential threat to the welfare of patients assigned to his/her care, to hospital visitors, or to other students or faculty (including radiology and medical staff).
2. Illegal activities such as stealing, assault, battery, etc.
3. Professional misconduct such as falsifying records, working under the influence of alcohol or drugs, pilfering hospital property for personal use, betrayal of patient confidentiality, etc.
4. Physical abuse: striking, pinching, biting, sexual abuse, etc.
5. Verbal abuse: ridicule, threats, use of foul language, etc.
6. Neglect: failure to perform assigned care, treatments, etc.
7. Negligence: failure to perform or performing something that causes harm to the patient.

All RADS students must be aware of how their attitudes and behavior interrelate **and** apply to the ARRT Code of Ethics, the ARRT *Standards of Ethics*, and the SIUC Student Conduct Code. The rationale being that the above examples of poor/criminal behavior are direct violations of these Codes and Standards. Violations that will prevent the student from completing the RADS Program will most likely will prevent the student from completing his/her education at SIUC.

Please keep in mind that each of our affiliate clinical sites has a signed clinical affiliation contract (Memorandum of Understanding (MOU)) with the SIUC Radiologic Sciences Program. Each signed contract is kept in the office of the Director of the School of Health Sciences. Our hospitals have the responsibility to protect the health and safety of their patients, medical staff, employees and visitors. Therefore, these hospitals have the right to request the removal of any student from participation in the clinical experience at that facility when the hospital deems the student poses a danger to the health and safety of patients or staff, or such removal is in the best interest of patient care and treatment.

Any student found guilty of unsafe clinical practice will be suspended from the Radiologic Sciences Program with no opportunity for readmittance. Additional

University sanctions may be applied affecting the student's University standing.

A student who believes he or she has been unreasonably denied an educational benefit due to his or her religious belief or practices may petition in writing as follows:
Cases involving class attendance or class examinations that are unresolved at the class instructor level may be appealed by the student by filing a petition in writing, within thirty (30) calendar days of the incident being appealed, to the chair or coordinator of the department or program in which the course is offered. In the event the case is not resolved to the student's satisfaction at the department/program level within five (5) working days after the chair's receipt of the petition, the student may petition in writing to the dean of the school or college to which that teaching department or program reports.

The student's petition to the school or college level must be filed with the dean within five (5) working days of the decision at the department level. Should the case not be resolved to the student's satisfaction at the school or college level within five (5) working days of the petition filing at that level, the student may petition the Provost. If the student is still not satisfied at that level within the five (5) working day time period, he or she may petition to the Chancellor within another five (5) working days. Decisions of the Chancellor may be appealed to the President, and to the Board of Trustees if necessary, in accordance with Bylaws of the Board of Trustees. In cases involving admissions, *the grievance process should follow the time frames described above,* with the initial petition being filed with the Director of Admissions, which is the only filing point prior to the Provost.

APPENDIX E

RADIOLOGIC SCIENCES PROGRAM POLICY ON SEXUAL HARASSMENT

UNIVERSITY SEXUAL HARASSMENT POLICY

APPENDIX E

Radiologic Sciences Program Policy and General Statement.

Southern Illinois University at Carbondale is committed to creating and maintaining a community in which students, faculty, and staff can work together in an atmosphere free of all forms of harassment, exploitation, or intimidation. Sexual harassment, like harassment on the basis of race or religion, is a form of discrimination expressly prohibited by law. It is a violation of Title VII of the Federal 1964 Civil Rights Act and Title IX of the Educational Amendments of 1972 and a civil rights violation of the Illinois Human Rights Act 1992.

In addition to being illegal, sexual harassment runs counter to the objectives of the Radiologic Sciences program. When people feel coerced, threatened, intimidated, or otherwise pressured by others into granting sexual favors, or are singled out for derision or abuse because of their gender, their academic and clinical performance is liable to suffer.

Sexual harassment affects a person's health through physical and emotional suffering, fear, stress, decreased self-worth, absenteeism, and diminished quality of work. Family and working relationships suffer as well. It destroys trust, reputation, safety, productivity, and morale. Sexual harassment is costly in terms of absenteeism, time, recruiting, rehiring, and retraining, and in terms of legally resolving a sexual harassment complaint.

Such actions violate the dignity of the individual and the integrity of the University as an institution of higher learning.

In particular, the Radiologic Sciences program will not tolerate the sexual harassment or abuse of any of our students, whether the initiator is another student, patient, clinical site employee, or visitor. Any student violating this policy will be subject to disciplinary actions up to and including suspension from the program.

Sexual harassment may involve the behavior of a person of either sex toward a person of the opposite or the same sex. Examples of behavior that would be considered sexual harassment include, but are not limited to, the following:

1. Sexual cooperation affecting the condition of future employment;
2. Sexual cooperation affecting the results of a behavior rating, clinical competency exam, and/or advanced modality rotation;
3. Repeated flirtation, advances, and propositions;
4. Inappropriate touching and/or physical assault;
5. Persistent requests to date;

6. Sexual comments;
7. Names or labels;
8. Continuing behavior after objection;
9. Sexually explicit material.

Appropriate Actions

Any student experiencing sexual harassment during a clinical internship should follow the procedure for "Student Grievance Appeal," with specific attention to:

1. Know your rights;
2. Speak out, say **"NO!"** or **"STOP THAT!"**
3. State your wishes assertively, **do not apologize** for the perpetrator's offensive behavior;
4. Pay attention to cues and body language;
5. Report it immediately to the Clinical Supervisor;
6. Keep a record noting time, date, words spoken, location and circumstances, feelings/other responses, names of other people in area, etc. This record helps document repeated behavior.

If a student comes to another student, staff technologist, the Clinical Supervisor, or University faculty for help with a sexual harassment complaint, we strongly encourage following the procedures listed below.

1. Listen - do not preach or offer your own opinion.
2. Provide assurances of no retaliation; offer to reassign the person to another area during the investigation;
3. If you are the appropriate person, conduct a swift and thorough investigation;
4. If not, encourage the student to tell someone who can take action;
5. Take the appropriate action.

Any other procedures identified in the Hospital Radiology Department's policy on sexual harassment should be followed and documented.

Further information on sexual harassment is located on-line at

http://equity.siu.edu

http://equity.siu.edu/title-9.php

http://equity.siu.edu/_common/documents/resources/title-ix-protections.pdf

Fact Sheet-Title IX Protections from Bullying and Harassment in Schools http://equity.siu.edu/_common/documents/resources/cyberbullying-sexual-harassment.pdf

Title IX of the Education Amendments and Southern Illinois University Carbondale policy prohibits discrimination in the provision of services of benefits offered by the University based on gender. Any person (student, faculty or staff) who believes that discriminatory practices have been engaged in based upon gender may discuss their concerns and file complaints of possible violations of Title IX.

http://safe.siu.edu/index.php Safety Awareness Facts and Education (SAFE)

http://policies.siu.edu/policies/sexual-assault-dating-violence-domestic-violence-stalking.php SIUC's policy on Sexual Assault, Dating Violence, Domestic Violence and Stalking

Title IX Coordinator
152 Davies Hall Mail Code 4316
Southern Illinois University Carbondale
Carbondale, Illinois 62901
618/453-4807 or 618/453-1395 (fax)

UNIVERSITY POLICY CONCERNING SEXUAL HARASSMENT

General Policy Statement

Southern Illinois University Carbondale is committed to creating and maintaining a community in which students, faculty, and staff can work together in an atmosphere free of all forms of harassment, exploitation, or intimidation. Sexual harassment, like harassment based on race or religion, is a form of discrimination expressly prohibited by law. It is a violation of Title VII of the Federal 1964 Civil Rights Act and Title IX of the Educational Amendments of 1972 and a civil rights violation of the Illinois Human Rights Act 1992.

In addition to being illegal, sexual harassment runs counter to the objectives of the University. When people feel coerced, threatened, intimidated, or otherwise pressured by others into granting sexual favors, or are singled out for derision or abuse because of their gender, their academic and work performance is liable to suffer. Such actions violate the dignity of the individual and the integrity of the University as an institution of higher learning. Academic freedom can exist only when every person is free to pursue ideas in a non-threatening, non-coercive atmosphere of mutual respect. Sexual harassment is harmful not only to the persons involved, but also to the entire University community. The University will take whatever action

is needed to prevent, stop, correct, or discipline behavior that violates this policy. Disciplinary action may include, but is not limited to, oral or written warnings, demotion, transfer, suspension, or dismissal for cause.

What is Consent & Respect Training?

Consent & Respect is an online education program regarding sexual violence and bystander intervention. The course reflects the university's commitment to campus safety and compliance with the federal Violence Against Women Act and the Illinois Preventing Sexual Violence in Higher Education Act.

Consent & Respect is offered through 3rd Millennium Classrooms, an online provider that guarantees confidentiality. While SIU tracks whether or not the course has been completed, students' individual responses to questions within it are completely confidential and are not shared with the university.

Effective Fall 2016, Consent & Respect training is mandated for all students, whether traditional or non-traditional, in on-campus, off-campus, or online programs. Students will be notified of the need to complete the training via their SIU email accounts on an annual basis.

Students who do not complete the training will have holds placed on their records and will not be able to register for subsequent semesters until the training is successfully completed. There are no exceptions to completing Consent & Respect training.

For additional information regarding Consent & Respect training, please contact the Office of Equity and Compliance at odetraining@siu.edu or 618-453-4807.

APPENDIX F

SIUC POLICY STATEMENT ON HIV/AIDS

APPENDIX F
SIUC POLICY STATEMENT ON HIV/AIDS

GENERAL POLICY

Please see website for more information https://policies.siu.edu/personnel-policies/chapter4/ch4-all/aids.php

Medical Clinic at the SIU Student Health Center (http://shc.siu.edu/medical-clinic/std-testing)

Medical problems may interfere with the student's ability to succeed academically. The medical clinic offers diagnostic services, including lab and X-ray, treatment and follow-up care. The medical clinic is known for delivering exceptional and responsive care. In most instances, students with an urgent medical need may be seen the same day they call for an appointment.

- Schedule your appointment via the Saluki Health Portal or by calling our Appointment Line at (618) 536-2391

APPENDIX G

THE UNIVERSITY REPORT OF

INJURY/INCIDENT/HAZARD

and/or

EXPOSURE TO BLOODBORNE PATHOGENS

Instructions for completing the University report of Injury/Incident/Hazard and the University Blood borne Pathogens Exposure Report

The SIUC University Report of Injury/Incident/Hazard and the/or SIUC University Blood borne Pathogens Report are completed by the injured Radiologic Sciences student or by the appropriate Clinical Supervisor on behalf of the injured student when the imaging/therapy department does not have its own student-oriented 'Incident Report' form.

THE UNIVERSITY REPORT OF INJURY/INCIDENT/HAZARD

I. Parts I – V are to be completed by the injured Radiologic Sciences student or by the Clinical Supervisor on behalf of the injured student.

Additional copies of this Injury/Incident/Hazard Report form can be downloaded at www.cehs.siu.edu/_common/documents/incident_report_2.pdf

II. Once this form is completed:

A. Send a copy of this completed form to the appropriate SIUC Radiologic Sciences Program Director or Clinical Coordinator.
   1. Sandi Watts or Lisa Bickel for Diagnostic Radiography
   2. Jennifer Walker for MRI/CT.
   3. Shannon Anderson or Amy Bro for Medical Sonography.
   4. Rick McKinnies or Brandon Hirsch for Radiation Therapy.

B. Place the original form in the student's radiology department file.

C. Where applicable, send a copy of this completed form to the SIUC Student Health Center Medical Records Department **and** send a copy of this completed form to the student's personal physician for follow-up treatment. Please make sure the injured student's SIUC DawgTag number is on all documents sent to the SIUC Student Health Center.

III. Exposure to Blood borne Pathogens

A. Download and complete the 2-page "Blood borne Pathogens Exposure Report" form at
www.cehs.siu.edu/_common/documents/Bloodborne_%20Pathogens_%20Exposure_Report.pdf

B. Place the original in the student's Radiology department file, and send a copy this completed form to the appropriate SIUC Radiologic Sciences Program Director or Clinical Coordinator.
   1. Sandi Watts or Logan Queen for Diagnostic Radiography
   2. Jennifer Walker for MRI/CT.
   3. Shannon Anderson or Lisa Bickle for Medical Sonography.
   4. Rick McKinnies or Brandon Hirsch for Radiation Therapy.

C. Where applicable, send a copy of this completed form to the SIUC Health Center Medical Records Department **and** send a copy of this completed form to the student's personal physician for follow-up treatment. Please make sure the injured student's SIUC DawgTag number is on all documents sent to the SIU Student Health Center.

Report of Injury/Incident/Hazard

Center for Environmental Health and Safety
Southern Illinois University Carbondale
1325 Radio Drive, Mail Code 6898
http://www.cehs.siu.edu
Phone (618)-453-7180; Fax: (618) 453-7192

It is the responsibility of each supervisor to ensure that this report is filed with the Center for Environmental Health and Safety within 24 hours of becoming aware of an incident or hazard related to SIU facilities or operations.

<table>
<tr><td rowspan="6">I.
PERSON INVOLVED IN INCIDENT</td><td colspan="2">Name (Last, First, Mi)</td><td>Sex ☐ F ☐ M</td><td>E-Mail</td></tr>
<tr><td>Date Of Birth</td><td colspan="2"></td><td>AIS or Dawg Tag#</td></tr>
<tr><td colspan="3">Address (Local)</td><td>Phone (W) _____ _____ _____
(H) _____ _____ _____</td></tr>
<tr><td colspan="2">Status At Time Of Incident
☐ Employee ☐ Visitor
☐ Student ☐ Other (Specify):</td><td>If An Employee, Give Job Title And Department</td><td>If A Visitor, State Purpose Of Campus Visit</td></tr>
<tr><td colspan="4">IF OTHERS WERE INVOLVED, ATTACH ADDITIONAL COPIES OF THIS FORM FOR EACH PERSON.</td></tr>
<tr><td colspan="4">Did Incident Arise Out Of And In The Course Of University Employment? ☐ Yes ☐ No</td></tr>
<tr><td rowspan="6">II.
INCIDENT/ OR HAZARD DESCRIPTION</td><td>Place Where Accident/Incident Occurred Or Hazard Is Located</td><td>Date & Time Of Incident</td><td colspan="2">Name Of Area Supervisor Where Incident Occurred Or Hazard Is Located.</td></tr>
<tr><td colspan="4">Describe Activity Being Performed By Person Involved In Incident (I.E. Driving Truck, Lifting Crate, Etc.)</td></tr>
<tr><td colspan="4">Fully Describe Incident/Hazard (Attach Additional Sheets If Necessary.)</td></tr>
<tr><td>List Any Witness Present Name</td><td>Address</td><td colspan="2">Phone (W) ____ ___ _____</td></tr>
<tr><td>Additional Witness(es) Present Name</td><td>Address</td><td colspan="2">Phone (W) ____ ___ _____</td></tr>
<tr><td></td></tr>
<tr><td rowspan="3">III.
INJURY</td><td colspan="4">Did This Incident Result In Injury To The Person Involved? ☐ Yes ☐ No</td></tr>
<tr><td colspan="4">IF INJURY OR ILLNESS RESULTS FROM AN INCIDENT ARISING OUT OF AND IN THE COURSE OF UNIVERSITY EMPLOYMENT, THE INJURED PERSON OR THEIR SUPERVISOR (If injured person is unable) MUST CALL TRISTAR Risk Enterprise Management, Inc. AT 1-855-495-1554 AND REPORT THE INJURY OR ILLNESS</td></tr>
<tr><td colspan="4">Describe Nature And Scope Of Personal Injury, If Any

Was Medical Care Sought? ☐ No ☐ Yes: Place & Date of Treatment _____</td></tr>
<tr><td>IV.
PROPERTY DAMAGE</td><td colspan="4">Describe Property Damage, If Any</td></tr>
<tr><td rowspan="2">V.
SIGNATURE</td><td colspan="3">Printed Name Of Person Completing Form</td><td>Job Title/Occupation</td></tr>
<tr><td colspan="3">_____ _____
Signature Of Person Completing Form Date</td><td>Phone Number (W) _____ _____ _____
(H)_____ _____ _____</td></tr>
</table>

Revised 04/03/13

BLOOD-BORNE PATHOGENS EXPOSURE REPORT
Southern Illinois University at Carbondale

In case of exposure to blood-borne pathogen(s), complete this form and return to the Center for Environmental Health and Safety within 24 hours. A copy must be taken to the SIUC Health Service or other healthcare provider for post-exposure evaluation. If other persons were involved, attach additional copies of this form for each person involved.

Date of Report: _____ Time of Report:_____

Name (Last, First, M.I.): _____

Sex: [ ] M [ ] F Social Security Number: _____ SIUC DawgTag#_____

Address (Local): _____Date of Birth: _____

Work Phone: _____ Home Phone: _____

Status at time of exposure: Employee [ ] Student [ ] Faculty [ ] Other (Explain): [ ]

Job title: _____ Duties related to exposure: _____

Has the exposed individual been immunized against hepatitis B virus? Yes [ ] No [ ]

Dates of immunization (1)_____ (2)_____ (3)_____

Place where exposure incident occurred: Date: Time:

Did incident arise out of and in the course of University employment?
Yes [ ] No [ ]

Name of individual in charge of area where exposure occurred:

List any witnesses present:
Name: Address: Telephone:

Personal protective equipment in use at time of exposure:

Exposure to:

[ ] Blood
[ ] Body fluid with visible blood
[ ] Vaginal secretions
[ ] Seminal fluid
[ ] Internal body fluids (circle one)
cerebrospinal, synovial, pleural, amniotic, pericardial, peritoneal

---

Type of Exposure:

[ ] Needlestick/sharps accident
[ ] Contact with mucous membranes (eyes, mouth, nose)
[ ] Contact with skin (circle all that apply)
broken, chapped, abraded, dermatitis, prolonged contact, extensive contact

APPENDIX H

SUBMITTING A CLAIM TO UNIVERSITY HEALTH SERVICES

Submitting a claim to the SIUC Health Center

In order for a claim to be covered under the Student Medical Extended Care Benefits Plan, a written claim **must** be filed with the Student Health Programs Medical Benefit Office within 90 days of the date on which the accident, injury, or illness giving rise to the claim occurred.

1. If there is any other insurance policy or policies under which a Student is eligible for benefits, that policy or policies is considered primary. If you have primary insurance, please submit your bills to that insurance first. The Explanation of Benefits (EOB) information explaining what was paid or denied by the primary coverage(s) must be sent to the Student Health Programs Medical Benefits Office when submitting a claim and/or bills. Explanation of Benefits must be submitted within 180 days from the date of the service for eligible charges.

2. An **Extended Claim Form** and **Primary Insurance Form** will need to be completed for each illness or injury. The Student may obtain these forms in person at the Student Health Programs Medical Benefit Office or on-line: http://shc.siu.edu/insurance then click on "Forms" in right column. Or access each form directly:

   Primary Insurance Form: http://shc.siu.edu/_common/pdfs/insurance/PrimaryIns.pdf

   Extended Care Claim Form:
   http://shc.siu.edu/_common/pdfs/insurance/Extend_Care_Claim.pdf

   If these forms are not completed, the claim will be denied.

   Submission of bills without completed claim forms is **NOT** sufficient to submit a claim.

3. The itemized bills (not just "Balance Due" statements) must be mailed or delivered in person to the Student Health Programs Medical Benefit Office within 90 days from the end of the semester in which the care was received. Claims submitted after this date will not be considered without reasonable justification (SIUC's sole determination of reasonableness) for the delay in filing the claim. When Hospital charges are incurred, the Hospital must file a standard insurance acceptable bill (UB92) with the claim for consideration of payment. For Physician's charges and other expenses, itemized bills from each provider must be submitted.

HOW TO APPEAL A CLAIM

Claim Denial

In most cases, the Student Medical Benefit Office will furnish a written notice of denial of a claim within 30 days after the claim is filed. If additional time is needed, a notice will be sent to the claimant explaining the need for additional time which may extend us to 180 days. In the event the claim is denied, the notice will state:

1. The specific reason or reasons for the denial.
2. The specific reference to the pertinent Plan provisions which prompted the denial.
3. When appropriate, a description of any additional material or information that is needed, and an explanation of why it is necessary.
4. Information on how to contact the Student Medical Benefit Office if the covered person has any questions regarding the claim.

Claim Appeals

If a claim has been partially or fully denied, the claimant is entitled to a further review. The claimant or the claimant's duly authorized representative may request a review of pertinent documents, and submit issues and comments in writing to support the claimant's position. All appeals must be submitted in writing no more than 60 days after the denial to the Student Health Programs Medical Benefits Office at:

Student Medical Insurance Office

Student Health Center, Mail Code 6740

374 East Grand Avenue

Southern Illinois University Carbondale

Carbondale, IL 62901

The Claims Administrator will acknowledge receipt of the appeal, conduct the review and notify the claimant of the decision within 60 days. In the event that additional time to review the claim is necessary, the Claims Administrator will notify the claimant that an additional 60 days is necessary to complete the review of the appeal.

APPENDIX I

PREGNANCY POLICY FOR RADIOLOGIC SCIENCES STUDENTS

APPENDIX I

The Pregnant Diagnostic Radiography Student

The embryo-fetus is a rapidly reproducing cell system. As such, it is especially sensitive to radiation damage. The effects of radiation in utero are time related and dose dependent. These effects include prenatal death, neonatal death, congenital abnormalities especially of the central nervous system, malignancy induction, general impairment of growth, genetic effects and mental retardation.

Digital radiography, digital fluoroscopy, and angio-interventional procedures use high frequency generators where the radiation intensity at the tabletop can be 20 R per minute, and the radiation dose to the patient approaches 3.0 Gy. As such, the scatter radiation has a greater intensity than that produced during routine fluoroscopy.

Similarly, the pregnant student must be aware of the hazards from Nuclear Medicine examinations. For example, radioiodine is known to concentrate in the thyroid gland. The fetal thyroid gland begins functioning at 10 weeks gestation. Radioiodine readily crosses the placenta, enters fetal circulation and concentrates in the fetal thyroid gland, thus impairing the growth and function of this vital organ. The pregnant Radiologic Sciences student must use extreme caution when working with Nuclear Medicine patients to reduce her chances of absorbing minute amounts of radioiodine and/or other radioactive substances.

Objective 4.2, of the "Standards for an Accredited Educational Program in Radiologic Sciences" of the Joint Review Committee on Education in Radiologic Technology (JRCERT) states that "...the program assures that Nuclear Regulatory Commission regulations regarding the declared pregnant student (declared pregnant worker) are published and made known to accepted and enrolled female students." In order to comply with Objective 4.2, the SIUC Radiologic Sciences Diagnostic Radiography faculty in conjunction with the Radiologic Science Advisory Committee believes it is the responsibility of the pregnant Radiologic Sciences student to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of her pregnancy and estimated date of the baby's birth (delivery). Formal, voluntary notification (declaration of pregnancy) is the only means by which the clinical facility and the SIUC Radiologic Sciences program can ensure that the dose to the embryo-fetus is limited during the pregnancy. In the absence of the voluntary, written disclosure, a student cannot be considered pregnant. (This policy of voluntary notification is based on U. S. Nuclear Commission Regulatory Guide 8.13, Revision 3, June1999, "Instruction Concerning Prenatal Radiation Exposure").

The total dose limit to the embryo-fetus, during pregnancy is 5 mSv. Once the pregnancy is declared, the fetal exposure must not exceed 0.5 mSv per month, as monitored by a "Baby" film badge, and worn at waist level beneath a lead apron. To comply with this embryo-fetus dose limit, the pregnant Radiologic Sciences student has the option to:

1. Continue her clinical and didactic education without modification or interruption. The student accepts full responsibility for her own actions and the health of her baby. Furthermore, the student absolves from liability her Clinical site and its Radiology staff, the SIUC Radiologic Sciences program and its faculty, and SIUC, from all complications that may occur during fetal growth, the birth, and the postnatal development of her baby.

2. Continue her clinical and didactic education with some modification of her clinical assignments. The pregnant student will not participate in portable radiography, fluoroscopic/C-Arm procedures, angiography, Nuclear Medicine exams, and high-dose rate brachy-therapy rotations. A grade of incomplete "INC" will be given until the student has completed all clinical education missed during the pregnancy. The completion of the "INC" may delay the student's sitting for the ARRT Radiography Exam, or any of its Advanced Exams.

3. Take a leave of absence from the clinical assignments during her pregnancy. A grade of incomplete "INC" will be given until the student has completed all clinical and didactic education missed during the pregnancy. The completion of the "INC" may delay the student's sitting for the ARRT Radiography Exam, or any of its Advanced Modality Exams.

4. Take a leave of absence from the Radiologic Sciences program. If the student notifies the Program Director of her desire to return, she will be offered a position in the next class, in the following year.

Additionally, the student is directed to the following state and federal documents:

1. Joint Committee on Administrative Rules, Administrative Code, Title 32, Chapter 2, Section 340.280, Subchapters a-e. (www.ilga.gov/commission/jcar/admincode/032/032003400C02800R.html)

2. U. S. Nuclear Regulatory Commission, Regulatory Guide 8.13, Revision 3, June 1999, "Instruction Concerning Prenatal Radiation Exposure." www.nrc.gov/reading-rm/doc-collections/reg-guides/occupational-health/active/8-13/08-013.pdf

3. U. S. Nuclear Regulatory Commission, Regulatory Guide 8.29, Revision 1, February 1996, "Instruction Concerning Risks from Occupational Exposure." www.nrc.gov/reading-rm/doc-collections/reg-guides/occupational-health/active/8-29/08-029.pdf

4. U. S. Nuclear Regulatory Commission, Regulatory Guide 8.36, July 1992, "Radiation Dose to Embryo/Fetus." www.nrc.gov/reading-rm/doc-collections/reg-guides/occupational-health/active/8-36/08-036.pdf

SIUC RADIOLGIC SCIENCES PREGNANCY POLICY

The Radiologic Sciences Advisory Committee and the SIUC Radiologic Sciences faculty strongly believe that to limit the pregnant student to nonexposure activities would prevent her from completing the course objectives and thus compromise her education.

Furthermore, the Radiologic Sciences Advisory Committee and the SIUC Radiologic Sciences faculty recognize the basic premise of providing the pregnant student with the information to make an informed decision based on her individual needs and preferences. Thus all SIUC Radiologic Sciences students are provided with the following documents:

1. Joint Committee on Administrative Rules (JCAR), Administrative Code, Title 32, Chapter 2, Section 340.280, Subchapters a-e.
2. U.S. Nuclear Regulatory Commission Regulatory Guide 8.13, Revision 3, December 1999, “Instruction Concerning Prenatal Radiation Exposure”.
3. U. S. Nuclear Regulatory Commission, Regulatory Guide 8.36, July 1992, "Radiation Dose to Embryo/Fetus."

Finally, the Radiologic Sciences Advisory Committee in conjunction with the SIUC Radiologic Sciences faculty believe it is the responsibility of the pregnant Radiologic Sciences student to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of her pregnancy and estimated date of the baby’s birth (delivery). Formal, voluntary notification (declaration of pregnancy) is the only means by which the clinical facility and the SIUC Radiologic Sciences program can ensure that the dose to the embryo-fetus is limited during the pregnancy (not to exceed 5 mSv [500 mrem]). **In the absence of the voluntary, written disclosure, a student cannot be considered pregnant.**

Therefore, prior to attending each clinical semester, each SIUC Radiologic Sciences student shall read the documents in this Appendix, have his/her questions answered to his/her satisfaction, and choose to proceed with his/her Radiologic Sciences education as indicated on the Pregnancy Policy form contained herein.

If a Radiologic Sciences student becomes pregnant during a clinical semester, it is still her responsibility to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of her pregnancy and estimated date of the baby’s birth (delivery), and to indicate, on the Pregnancy Policy form, her decision towards the Radiologic Sciences program.

The voluntary, written disclosure of her pregnancy and her decision towards the Radiologic Sciences program will be kept in the pregnant student’s clinical file, maintained by

the program's respective Clinical Coordinator. Release of such information may occur only upon the written permission of the student in question.

The Radiologic Sciences student has the option to withdraw a previous declaration of pregnancy. It is her responsibility to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of the change in declaration.

Additionally, the student must return the previously acquired "Baby" dosimeter for proper processing, and for the closing of the "Baby's" dosimeter record.

PREGNANCY STATUS DECLARATION

The Southern Illinois University at Carbondale (SIUC) Radiologic Sciences faculty in conjunction with the Radiologic Technology Advisory Committee believe it is the responsibility of the pregnant Diagnostic Radiography student to advise her Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of her pregnancy and estimated date of her baby's birth (delivery). Formal, voluntary notification of pregnancy is the only means by which the clinical facility and the University Radiologic Sciences program can ensure that the dose to the embryo-fetus is limited during the pregnancy not to exceed 5 mSv. In the absence of the voluntary, written disclosure, a student cannot be considered pregnant.

WAIVER:
I fully understand the contents of these documents, have had my questions answered to my satisfaction, and I choose to proceed with my Radiologic Sciences education as indicated below.

_____ **I have received and reviewed the pregnancy policy.**

_____ **I am not pregnant** and choose to continue my clinical and didactic education without modification or interruption. If I become pregnant while in the Radiologic Sciences program, I accept the responsibility to advise my Clinical Instructor and Program Clinical Coordinator **voluntarily** and in **writing** of my pregnancy and estimated date of my baby's birth (delivery).

_____ **I am pregnant** and choose to continue my clinical and didactic education without modification or interruption. I accept full responsibility for my own actions and the health of my baby. Furthermore, I absolve, discharge, release, and hold harmless my Clinical site and its Radiology staff, and the Board of Trustees for Southern Illinois University together with its officers and employees (the Radiologic Sciences program and its faculty) for any legal liability, claims, damages or complications that may occur during fetal growth, birth, and postnatal development of my baby.

_____ **I am pregnant** and choose to continue my clinical and didactic education with some modification of my clinical assignments. I will not participate in mobile radiography, fluoroscopic/C-Arm procedures, angiography, Nuclear Medicine, and high-dose rate brachytherapy rotations. A grade of Incomplete "INC" will be given until I have completed all clinical education missed during my pregnancy. The completion of the "INC" may delay my sitting for the ARRT Radiography Exam.

_____ **I am pregnant** and choose to take a leave of absence from the clinical assignments during my pregnancy. A grade of Incomplete "INC" will be given until I have completed all clinical education missed during my pregnancy. The completion of the "INC" may delay my sitting for the ARRT Radiography Exam.

_____ **I am pregnant** and choose to take a leave of absence from the SIUC Radiologic Science program. If I notify the Program Director of my desire to return, I will be offered a position in the next class, the following year.

_____ **I choose to rescind my earlier declaration of pregnancy**, and resume my clinical and didactic education.

I agree to comply with the above-stated policy and with my decision as indicated above.

_____ _____
Student Signature Date

_____ _____
Supervising Clinical Instructor Date

_____ _____
Respective Radiologic Sciences Clinical Coordinator Date

APPENDIX J

UNIVERSITY LIABILITY INSURANCE

APPENDIX J

General Coverage Information

Due to copyright restrictions instituted by the SIU Board of Trustees, the reader is directed to the following webpages pertaining to University Risk Management, section 5 of the University President's Guidelines (https://siusystem.edu/about/section51.shtml).

Certificate of Insurance

Any clinical facility desiring a hard copy of the Certificate of Insurance governing the SIUC Radiologic Sciences Program, may request it from:

University Risk Management
Mail Code 6829
Southern Illinois University Carbondale
Carbondale, IL 62901

Phone: 618-536-2101
Fax: 618-453-5442

Or the Radiography Program faculty may complete the online "Certificate of Insurance Request form" located at http://siusystem.edu/risk-management/ on behalf of the clinical facility. Then Program faculty will forward the Certificate of Insurance to the appropriate clinical facility.

APPENDIX K – RAD 222 RADIOGRAPHY CLINIC 1

K-1: UNDERSTANDING OF CLINICAL RESPONSIBILITIES

K-2: RAD 222 IMAGE RECEPTOR TECHNOLOGY WORKSHEETS

APPENDIX K – RAD 222

K-1: UNDERSTANDING OF CLINICAL RESPONSIBILITIES

I, _____ hereby acknowledge that I have read and understand
the contents of this student handbook and agree to abide by these policies as stated or be subject to University recourse.

1. List the departmental or hospital intercom/phone code for:

   a. A patient experiencing cardiac or respiratory arrest.

---

   b. Assistance with a violent patient, family member or visitor.

---

   c. A fire noticed within the department or hospital.

---

   d. A weather emergency or natural disaster (tornado, earthquake, mine explosion, massive auto accident, bomb explosion).

---

2. List the name(s) of your Clinical Instructor(s).

---

4. Using the attached spreadsheet pages, for each X-ray room and Mobile/Portable Unit within your department, please identify the image receptor technology that is used in this
   Imaging department.

_____ _____
Student Signature Date

_____ _____
Supervising Clinical Instructor Date

*To be kept in the student's file at the program office.

APPENDIX K for RAD 222
K-2: Radiography Image Receptor Worksheets

Name of Hospital: _____

Course: RAD 222-001

Semester: Spring 20___

Directions: For Each X-ray room & Portable (Mobile) X-ray machine in your department,

- please identify the following items.
- Many of these items will be answered as Yes, No or Not Applicable (N/A).
- Please feel free to make more copies of this page to accommodate the imaging equipment found in your department.

This information will be incorporated in to the RAD 112 and RAD 352 classes to reflect the imaging equipment found in modern hospitals,

	Room ____	Room ____	Room ____
Manufacturer's Name	_____	_____	_____
Is this room Radiography only?	_____	_____	_____
Is this room Fluoroscopy on?	_____	_____	_____
Is this room a Rad & Fluoro room?	_____	_____	_____
Does this room use Digital Radiography w/Flat-Panel Detector (DR "Cassette")?	_____	_____	_____
Does this room use Digital Radiography w/Wired Flat-Panel Detector? (Wired = Tethered to X-ray Table)	_____	_____	_____
Does this room use DR w/a Wireless Flat-Panel Detector?	_____	_____	_____
Does this room use Computed Radiography (CR)?	_____	_____	_____
What are the CR Cassette Sizes used in this room?	_____	_____	_____

APPENDIX L for RAD 332 RADIOGRAPHY CLINIC 2

L-1: UNDERSTANDING OF CLINICAL RESPONSIBILITIES

L-2: RAD 332 IMAGE RECEPTOR TECHNOLOGY WORKSHEETS

L-3: STUDENT-HOSPITAL EMPLOYMENT AGREEMENT

APPENDIX L for RAD 332

L-1: UNDERSTANDING OF CLINICAL RESPONSIBILITIES

I, _____ hereby acknowledge that I have read and understand the contents of this student handbook and agree to abide by these policies as stated or be subject to University recourse.

1. List the departmental or hospital intercom/phone code for:

   a. A patient experiencing cardiac or respiratory arrest.

---

   b. Assistance with a violent patient, family member or visitor.

---

   c. A fire noticed within the department or hospital.

---

   d. A weather emergency or natural disaster (tornado, earthquake, mine explosion, massive auto accident, bomb explosion).

---

2. List the name(s) of your Clinical Instructor(s).

---

3. Using the attached spreadsheet pages, for each X-ray room and Mobile/Portable Unit within your department, please identify the image receptor technology that is used in this Imaging department.

_____ _____
Student Signature Date

_____ _____
Supervising Clinical Instructor Date

*To be kept in the student's file at the program office.

APPENDIX L for RAD 332

L-2: Radiography Image Receptor Worksheets

Name of Hospital: _____

Course: RAD 332-001

Semester: Fall 20___

Directions: For Each X-ray room & Portable (Mobile) X-ray machine in your department,

- Please identify the following items.
- Many of these items will be answered as Yes, No or Not Applicable (N/A).
- Please feel free to make more copies of this page to accommodate the imaging equipment found in your department.

This information will be incorporated in to the RAD 112 and RAD 352 classes to reflect the imaging equipment found in modern hospitals,

	Room ____	Room ____	Room ____
Manufacturer's Name	_____	_____	_____
Is this room Radiography only?	_____	_____	_____
Is this room Fluoroscopy on?	_____	_____	_____
Is this room a Rad & Fluoro room?	_____	_____	_____
Does this room use Digital Radiography w/Flat-Panel Detector (DR "Cassette")?	_____	_____	_____
Does this room use Digital Radiography w/Wired Flat-Panel Detector? (Wired = Tethered to X-ray Table)	_____	_____	_____
Does this room use DR w/a Wireless Flat-Panel Detector?	_____	_____	_____
Does this room use Computed Radiography (CR)?	_____	_____	_____
What are the CR Cassette Sizes used in this room?	_____	_____	_____

APPENDIX M-Forms for RAD 222 Radiography Clinic 1

APPENDIX M-1: HOSPITAL POLICY MANUAL & DEPT. ORIENTATION FORM

APPENDIX M-2: RECEIPT-CLINICAL SYLLABUS & CLINICAL HANDBOOK & UNDERSTANDING OF CLINICAL POLICIES

APPENDIX M-1 - RAD 222 - Radiography Clinic 1

HOSPITAL POLICY MANUAL
and
DEPARTMENT ORIENTATION FORM

I, _____ have read and understand the Hospital Policy Manual at _____. I agree to acknowledge and abide by the policies in the manual of _____ Hospital/Clinic. If I do not abide by the policies as stated, I understand that I will be subject to expulsion from the clinical site.

I also have been given a hospital orientation as well as a Radiology Department orientation. The purpose of these orientations is to familiarize myself with the following:

- hazards (fire, electrical, chemical);
- emergency preparedness;
- medical emergencies within the Imaging department;
- HIPAA;
- Standard Precautions;
- Professional clinical attire (dress code);
- locations of various departments throughout the hospital;
- the hierarchy of the Radiology/Imaging Department;
- personal cell phone use in the Radiology/Imaging Department;
- personal use of the computer in Radiology/Imaging Department;
- image processing;
- the patient flow procedure from the beginning paperwork through image filing system and;
- the routine protocols and procedures of this Imaging department.

Finally, I have successfully completed the hospital orientation objectives and the radiology department objectives as these pertain to my assigned clinical site. These objectives are stated in Chapter 3 of this Radiography Clinical Handbook.

_____ _____
Student Signature Date

_____ _____
Supervising Clinical Instructor Date

APPENDIX M-2 - RAD 222 - Radiography Clinic 1

RECEIPT OF CLINICAL SYLLABUS AND CLINICAL HANDBOOK

I have received a copy of the syllabus for the course RAD 222 Radiography Clinic 1.

The instructor has explained the contents and I have an understanding of the policies contained in the syllabus and in the Radiography Clinical Handbook, including but not limited to:

- Attendance;
- Tardiness;
- Daily clinical hours;
- Clinical absences;
- Clinical make-up days;
- Cell phone use;
- Hospital computer use;
- Radiography Program dress code;
- Competency examinations; and,
- Clinical grading policy

I understand the Program faculty, University administration, and/or Radiography Advisory Committee members may review written assignments and/or clinical competency exams submitted by me.

_____ _____

Student Signature Date

_____

Print Student Name

APPENDIX N-Forms for RAD332 Radiography Clinic 2

APPENDIX N-1: HOSPITAL POLICY MANUAL & DEPT. ORIENTATION FORM

APPENDIX N-2: RECEIPT-CLINICAL SYLLABUS & CLINICAL HANDBOOK & UNDERSTANDING OF CLINICAL POLICIES

APPENDIX N-1 - RAD 332 - Radiography Clinic 2

HOSPITAL POLICY MANUAL and DEPARTMENT ORIENTATION FORM

I, _____ have read and understand the Hospital Policy Manual at _____. I agree to acknowledge and abide by the policies in the manual of _____ Hospital/Clinic. If I do not abide by the policies as stated, I understand that I will be subject to expulsion from the clinical site.

I also have been given a hospital orientation as well as a Radiology Department orientation. The purpose of these orientations is to familiarize myself with the following:

- hazards (fire, electrical, chemical);
- emergency preparedness;
- medical emergencies within the Imaging department;
- HIPAA;
- Standard Precautions;
- Professional clinical attire (dress code);
- locations of various departments throughout the hospital;
- the hierarchy of the Radiology/Imaging Department;
- personal cell phone use in the Radiology/Imaging Department;
- personal use of the computer in Radiology/Imaging Department;
- image processing;
- the patient flow procedure from the beginning paperwork through image filing system and;
- the routine protocols and procedures of this Imaging department.

Finally, I have successfully completed the hospital orientation objectives and the radiology department objectives as these pertain to my assigned clinical site. These objectives are stated in Chapter 3 of this Radiography Clinical Handbook.

_____ _____
Student Signature Date

_____ _____
Supervising Clinical Instructor Date

APPENDIX N-2 - RAD 332 - Radiography Clinic 2

RECEIPT OF CLINICAL SYLLABUS AND CLINICAL HANDBOOK
and
UNDERSTANDING OF CLINICAL POLICIES

I have received a copy of the syllabus for the course RAD 332 Radiography Clinic 2.

The instructor has explained the contents and I have an understanding of the policies contained in the syllabus and in the Radiography Clinical Handbook, including but not limited to:

- Attendance;
- Tardiness;
- Daily clinical hours;
- Clinical absences;
- Clinical make-up days;
- Cell phone use;
- Hospital computer use;
- Radiography Program dress code;
- Competency examinations; and,
- Clinical grading policy

I understand the Program faculty, University administration, and/or Radiography Advisory Committee members may review written assignments and/or clinical competency exams submitted by me.

_____ _____
Student Signature Date

_____
Print Student Name

APPENDIX O

FORMS FOR CLINICAL EDUCATION

TIME SHEET

Name: _____ **Class:** _____ **Hospital:** _____

Legend: P—Present: (7-7.5 hrs/day excluding lunch) A—Absent T—Tardy H—Holiday PD—Personal Day
Sn—Snow day, no makeup is needed IF called in on time BL—Bereavement Leave, must document relationship to the deceased

Spring Semester _____ **Year 20**_____

MONTH	1	2	3	4	S	6	7	8	9	10	)i	12	13	14	15	16	17	18	1»	20	21	22	23	24	25	26	27	28	29	30	31	HRS. PRESENT	HRS. ABSENT	HRS. MADE UP	TOTAL DAYS
JAN.																																			
FEB.																													-						
MARCH																																			
APRIL																																			
MAY																																			

Fall Semester _____ **Year 20**_____

MONTH	1	2	3	4	5	6	7	8	9	10	n	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	HRS. PRESENT	HRS. ABSENT	HRS. MADE UP	TOTAL DAYS
AUG.																																			
SEPT.																																			
OCT.																																			
NOV.																																			
DEC.																																			

_____

Signature of Clinical Supervisor, Clinical Instructor or his/her Designee DATE

Student Name_____ **Hospital**_____

RADIOGRAPHIC EXAM EVALUATION (Competency) FORM Exam Performed

_____

	POSITION 1 AND COMMENTS		POSITION 2 AND COMMENTS		POSITION 3 AND COMMENTS		POSITION 4 AND COMMENTS	
1. Patient Care								
2. Identification								
3. Positioning								
4. Exposure Factors								
5. Cassette/IR								
6. Radiation Protection								
7. Equipment Manipulation								
8. Other (specify)								
9. Portable and Surgery Skills								
10. Fluoroscopic Skills								
11. Check Box if Film Repeated								

_____ _____ _____ _____

Evaluator's Signature & Date **Evaluator's Signature & Date** **Evaluator's Signature & Date** **Evaluator's Signature & Date**

BASIC CRITERIA FOR EVALUATING STUDENT'S COMPETENCY EXAMS

1. PATIENT CARE

a. acquires the correct patient
b. correctly uses patient identifiers
c. has pt properly gowned
d. assists pt. into room
e. assists pts. to table, chest stand, etc.
f. explains procedures, clearly
g. gives proper moving instructions
h. other

2. IDENTIFICATION

a. proper use of marker (R or L)
b. use of post void, upright, open or closed, where applicable
c. proper pt. info keyed into computer
d. other

3. POSITIONING

a. part positioned properly
b. part centered to IR correctly
c. Central Ray (CR) not centered to body part or to IR
d. wrong X-ray tube angle
e. X-ray tube angled in wrong direction
f. grid or Bucky error
g. other

4. EXPOSURE FACTORS

a. machine factors; KV, mA. time set correctly
b. proper use of AEC & back-up time
correct AEC sensor(s) used
c. proper SID
d. full radiation exposure completed
e. gives proper breathing instructions
f. other

5. IMAGE RECEPTOR (IR)

a. correct IR size used, where applicable
b. correct IR placement (crosswise, lengthwise)
c. proper use of grids
d. other

6. RADIATION PROTECTION

a. proper collimation (CW or LW)
b. shields patient whenever possible
c. utilizes good self-radiation protection
d. other

7. EQUIPMENT MANIPULATION

a. manipulate X-ray tube correctly
b. X-ray tube placement (overhead, upright, decube)
c. DR image processor used correctly
d. correct DR image manipulation on monitor, if applicable
e. other

8. OTHER

a. questions related to anatomy visualized and/or exposure factors
b. specify any other problems that are not listed above

9. PORTABLE AND SURGERY SKILLS

a. uses proper isolation technique, if applicable
b. uses proper sterile technique, if applicable
c. uses mobile image intensifier/fluoro tower properly
d. uses equipment properly
e. uses C-arm properly
f. use of portable equipment
g. other

10. FLUOROSCOPIC SKILLS

a. manipulates fluoro tower locks correctly
b. sets up fluoro equipment correctly
c. securely attaches footboard to table
d. has supplies set up and properly prepared
e. other

If desired, you may use the following image grading scale:

5 = Excellent (100%)

4 = Very Good (95%)

3 = Good (90%)

2 = Fair (80%)

1 = Needs major improvement (70%)

Please comment as needed.

SIUC RADIOGRAPHY STUDENT
CLINICAL PERFORMANCE EVALUATION

Student Name:_____ Clinic Site: _____

Please rate each statement by placing the number that best describes the student's professional and clinical performance in the space provided.

0 = Unacceptable
1 = Requires Major Improvement
2 = Requires Minor Improvement
3 = Acceptable
4 = Good Performance
5 = Excellent (Consistently performs without need for direct supervision)
NA = Not applicable

Evaluation Item **Score & Comments**

1. Organization skills

_____

-Ability to evaluate needs of a technical situation before procedure starts, and demonstrates speed and accuracy in performing clinical exams/duties.
-Shows an efficient and methodical approach to each patient exam.
-Performs image projections in a logical sequence.
Comment: _____
_____

2. Quality of work

_____

-Shows evidence of proper radiographic image quality and minimal repeat radiographs.
-Demonstrates proper use of AEC, DR image receptor, collimation, grids, lead shielding, etc. -Achieves mastery of skills for Competency.
Comment: _____
_____

3. Comprehension and demonstration of imaging procedures

_____

-Degree to which student applies knowledge of positioning and exposure factors (technique) to produce diagnostically acceptable radiographic images.
Comment: _____
_____

4. Performance under pressure

_____

-Maintains composure in a stressful environment. Maintains focus despite setbacks.
-Performs well in a continuously changing setting.
Comment: _____
_____

5. Judgment and critical thinking

_____

-Exhibits logical thought and good judgment in making decisions, recommendations.
-Demonstrates respect for confidential patient information and HIPAA policies.
-Uses down-time wisely: follows department policy on personal cell phone use; does not abuse department computer
Comment: _____

_____

Evaluation Item **Score & Comments**

6. Self-confidence

_____

-Demonstrates self-reliance but asks for help when appropriate.
-Conveys confidence to the patient and to others.
Comment: _____

_____

7. Professional Ethics-Attitude-Behavior

_____

-Demonstrates an appropriate attitude and behavior with ALL hospital staff, RTs, CIs, visitors, etc.
-Shows an interest in learning despite criticism, or needing to repeat an image.
Comment: _____

_____

8. Initiative and quantity of work

_____

-Seeks out additional exams.
-Shows interest in participating in imaging exams without being told to do so.
-Actively seeks learning opportunities; readily helps others in need.
Comment: _____

_____

9. Attitude towards assigned tasks

_____

-Accepts all tasks and assignments with a positive attitude.
-Engages in all assigned procedures and activities. Completes assigned imaging exams.
Comment: _____

_____

10. Attitude towards advice-criticism-correction

_____

-Is receptive to suggestions or corrections, exercises self-control, and demonstrates interest in assignments. Accepts advice without negative comments or negative behavior.
-Engages in respectful dialogue to better understand instruction.
Comment: _____

_____

11. Punctuality and attendance

_____

-Extent to which student is present at clinical site without absence and/or tardiness.
-Arrives early/on time, ready to work. Gives appropriate or advanced notice of absence to CI or his/her designee.
Comment: _____

_____

12. Personal appearance/Clinical Attire

_____

-Radiography clinical attire is worn as stated in the Radiography Clinical Handbook.
-Personal hygiene and grooming is not messy (unkempt) or offensive.
Comment: _____

_____

Evaluation Item **Score & Comments**

13. Interpersonal relationship (rapport) with peers and patients

_____

-Demonstrates courtesy and empathy. Ability to establish good rapport and effective communication with the patient. Interaction with peers is respectful, supportive and kind.
-Interacts appropriately and effectively with ALL hospital staff, RTs, CIs, visitors, etc.
Comment: _____

_____

14. Teamwork

_____

-Demonstrates a cooperative, courteous attitude towards co-workers, considers the interests and feelings of others. Resolves conflict according to Program policy.
-Communicates effectively with faculty, CIs, peers, RTs.
Comment: _____

_____

Total Points (from all 3 pages**)**

_____ (Max. 70 points)

Would this student be hirable upon Program completion? Yes No (Please circle one)
If No, then please explain why.

Evaluator's Comments: _____

_____

Evaluator's Signature_____Date _____

I have reviewed this evaluation with the Clinical Instructor.
Student Comments: _____
_____

Student's Signature _____ Date _____

RAD 222/RAD332 CLINICAL COMPETENCY CHECKLIST

Directions: Between January <Date> & December <Date>, all SIUC Radiography students must demonstrate clinical competency in 36 Mandatory procedures & clinical competency in at least 15 of

the 60+ Elective procedures identified by the ARRT & listed on pages 1-4 in this document.

SIUC Radiography students must have **25** or more Elective procedures completed by December <Date>

in order to take a solid set of clinical skills to their future employer.

***** For the **Spring 20____** and **Fall 20**_____clinical semester combined, each student may ***simulate*** 10 exams from this list.

> For each Competency exam completed, the student must fill in the chart, below. Use "PT" for patient and "SIM" for simulation.

Use the initials of the RT with whom the student Comped the exam, for Competency verification.

R/F room = X-ray room w/Fluoro Tower	Mandatory or Elective	Date Completed	Eligible for Simulation	Comp Verified by:
CATEGORY 1 (Min. 5 Different "M" Exams)	#######	#######	#######	########
Adult Trauma Upper Extrem., Name Injured Part; Excl. Shoulder	M			
Bone Age (Hand & Wrist, Only)	E			
Elbow	M			
Finger(s)	M			
Forearm	M			
Hand	M			
Humerus	M		√	
Shoulder: Rotational Images w/ or w/o Grashey, Scap "Y", Axial Images	M			
Thumb	M		√	
Trauma Shoulder: Rotational Images **+** Grashey, "Y" and/or Axial Images	M			
Supraspinatous Outlet (Neer)	E			
Wrist w/ or w/o Scaphoid Image	M			
CATEGORY 2 (Min. 5 Different "M" Exams)	#######	#######	#######	########
Adult Trauma Lower Extrem., Name Injured Part; Excludes Hip	M			
Ankle	M			
Bone Age (Hand, Wrist & Hip)	E			
Calcaneus (Heel; Os Calcis)	E		√	
Femur	M		√	
Foot	M			
Hip (AP & Frog-Leg Lateral)	M			
Leg Lengths (Long Bone Measurements)	E			
Lower Leg (Tib-Fib)	M		√	
Knee w/ or w/o Sunrise Patella	M			
Oblique Knee (not part of routine Knee Imaging)	E			
Patella (PA, Lat. & Sunrise)	E		√	
Toe(s)	E		√	

Trauma Hip (Cross-Table Lateral; w/ or w/o AP Hip)	M		√	
Wgt-Bearing Foot	E			
Wgt-Bearing Knee	E			
Wgt-Bearing Hip	E			
CATEGORY 3 (Min. 4 Different "M" Exams)	#######	#######	#######	########
Cervical Spine w/ or w/o Swimmers	M			
Coccyx	E		√	
Flex & Extend Cervical Spine Images, only	E			
Flex & Extend Lumbar Spine Images, only	E			
Lumbar Spine	M			
Pelvis	M			
Pelvis w/Judet Images of Ilia	E			
Pelvis w/Inlet & Outlet Images	E			
S-I Joints w/AP Axial Sacrum Image	E		√	
Sacrum	E		√	
Scoliosis Series	E		√	
Skeletal/Bone Survey for Mets	E			
Thoracic Spine w/ or w/o Swimmers	M		√	
Trauma Cervical Sp (X-Table Lateral, w/ or w/o AP & Odontoid Images) Pt recumbent	M		√	
CATEGORY 4 (Min. 5 Different "M" Exams)	#######	#######	#######	########
Supine Abdomen (Recumbent KUB)--Child/Infant (≤ 6 y.o.)	E		√	
Child/Infant Chest (≤ 6 y.o.)	M		√	
Child Trauma Upper or Lower Extremity (≤ 6 y.o.)	E		√	
Extremities--Child/Infant (≤ 6 y.o.); Name Body Part Examined	E		√	
Abdomen/Obstruction Series w/ or w/o Erect CXR--Child/Infant	E			
Adult Chest--PA & Lateral Images	M			
Stretcher/Cart Chest or Wheelchair Chest	M			
Contrast Enema (BE w/ or w/o Air Contrast)	E			
Decubitus Abdomen Image, only	E		√	
Decubitus Lateral Chest Image, only	E		√	
Esophogram/Ba Swallow	E			
IVP, or IV Urography	E			
Modified Ba Swallow for Pathology w/ or w/o Video	E			
Obstruction Series/Acute Abdomen Series w/ or w/o Erect CXR	M			
Small Bowel Series	E			
Supine Recumbent Abdomen (Recumbent KUB)--1 image only	M			
Supine Erect Abdomen (Erect KUB)--1 image only	M		√	
Upper Airway/Soft-Tissue Neck w/ or w/o Contrast Agent	E		√	
Upper GI w/ or w/o Air Contrast	E			

CATEGORY 5 (Min. 1 Different "M" Exams)	#######	#######	#######	########
A-C Joints	E		√	
Clavicle	M		√	
Ribs w/ or w/o Erect CXR	M		√	
Scapula	E		√	
Sternum	E		√	
S-C Joints	E		√	
CATEGORY 6 (Min. 2 Different "E" Exam(s))	#######	#######	#######	########
Facial Bones w/ or w/o Zygomas (Zygomatic Arches)	E		√	
Mandible/Panorex for Mandible	E		√	
Nasal Bones	E		√	
Orbits (Bony or FB)	E		√	
Sinuses	E		√	
Skull	E		√	
Temporomandibular Joints (TMJs w/ or w/o tomos)	E		√	
CATEGORY 7 (Min. 1 Different "M" Exams)	#######	#######	#######	########
Geriatric Upper or Lower Extremity (≥ 65 y.o.)	M			
Geriatric Hip or Spine	E		√	
Geriatric Chest-PA & Lateral Images (≥ 65 y.o.)	M			
ANGIOGRAPHY w/ or w/o INTERVENTIONAL PROCEDURE	#######	#######	#######	########
Aortic Arch/4 Vessel Study	E			
Cerebral (Carotid, Vertebral or Both)	E			
Coronary Angiogram/Cardiac Catheterization	E			
Femoral (Aorta->Iliac->Femoral; AIF Run-Off)	E			
Pulmonary	E			
Renal	E			
Systemic	E			
ARTHROGRAM	#######	#######	#######	########
Ankle	E			
Elbow	E			
Knee	E			
Hip	E			
Shoulder	E			
TMJs w/ or w/o tomos	E			
Wrist	E			
BONE DENSITOMETRY	#######	#######	#######	########
Calibrate Machine, Examine Lumbar Sp & Hip, Analyze Data	E			
Calibrate Machine, Examine L-S Sp, Hip, Forearm/Wrist, Analyze Data	E			
C-ARM WORK IN OR	#######	#######	#######	########
Colonoscopy/Endoscopy	E			
Declot Angiogram--State Body Part Examined	E			
Epidural Injection—Pain Mgmt.	E			

Facet Injection—Pain Mgmt.	E			
Spinal Cord Stimulator Implant--Pain Mgmt.	E			
Fx Reduction/Orthopedic Procedure Name Body Part Examined Manipulation around a sterile field	M		√	
Laminectomy: Lumbar Spine or Cervical Spine	E			
OR Chole Lap/OR Cholangiogram/ERCP	E			
Hip Replacement-Hip Pinning	E			
Pacemaker/Swan Ganz/Porta Cath/CVP/PICC Line	E			
Vertebroplasty: Cervical Spine	E			
Vertebroplasty: Thoracic Spine	E			
Vertebroplasty: Lumbar Spine	E			
Cystogram/Nephrostogram/Retrograde Pyelogram in R/F Room	E			
ERCP (in R/F Room) or Lithotripsy	E			
Fistulogram (in R/F Room): Specify Location of Fistula	E			
Lumbar Puncture in R/F Room	E			
MYELOGRAPHY	#######	#######	#######	########
Cervical	E			
Lumbar Myelogram	E			
Thoracic Myelogram	E			
PORTABLES/RECOVERY ROOM	#######	#######	#######	########
C-Arm procedure (requiring manipulation to obtain more than one projection) Can be sterile or non-sterile	M		√	
Abdomen	M			
Abdomen--Child/Infant (**<** 6 y.o.)	E		√	
Chest	M			
Chest--Child/Infant (**<** 6 y.o.)	E		√	
Extremities--Name Body Part Examined	M			
Head Work	E			
Post Mortem Exam in Morgue	E			
Spine Work	E			
Post Mortem Exam in R/F Room	E			
SURGERY PORTABLES	#######	#######	#######	########
Colonoscopy/Endoscopy	E			
Declot Angiogram--Name Body Part Examined	E			
Epidural Injection—Pain Mgmt.	E			
Facet Injection—Pain Mgmt.	E			
Spinal Cord Stimulator Implant—Pain Mgmt.	E			
Fx Reduction/Orthopedic Procedure--State Body Part Examined	E			
Laminectomy: Lumbar Sp. or Cervical Sp.	E			
OR Chole Lap/Cholangiogram/ERCP	E			
Hip Replacement/Hip Prosthesis	E			

Pacemaker/Swan Ganz/Porta Cath/CVP/PICC Line	E			
T-Tube Cholangiogram (in R/F room)	E			
Voiding Cystogram (VCU/VCUG) in R/F Room	E			
VENOGRAPHY	#######	#######	#######	########
Inferior Vena Cava gram	E			
Lumbar	E			
Peripheral (Arm or Leg)	E			
Pulmonary	E			
Renal	E			
Vertebroplasty in R/F Room: Cervical Spine	E			
Vertebroplasty in R/F Room: Thoracic Spine	E			
Vertebroplasty in R/F Room: Lumbar Spine	E			
##################	#######	#######	#######	########
CATEGORY 8 (Min. 3 different rotations) (Specific to RAD 332 – Radiography Clinic 2)	#######	#######	#######	########
ADVANCED MODALITY ROTATIONS (Observe & Answer Objectives)	#######	#######	#######	########
PR = Program Requirement for SIUC Students	#######	#######	#######	########
Angiography-Interventional Procedures	E			
Computed Tomography	PR			
Magnetic Resonance Imaging	PR			
Nuclear Medicine	E			
Radiation Therapy	PR			
Sonography	E			
##################	#######	#######	#######	########

RAD 222 CLINIC 1 GRADE SHEET				
A. DOSIMETER & HOLDER RETURNED ON:			**(Date)**	
B. NUMBER OF SPRING MANDATORY COMPS COMPLETED				
Need at least 21 different "M" exams.				
C. NUMBER OF SPRING ELECTIVE COMPS COMPLETED				
Need at least 8 different "E" exams.				
D. TOTAL NUMBER OF ALL COMPS COMPLETED				
E. COMPS NOT COMPLETED OF REQ. MINIMUM OF 29				
F. GRADE FOR 29 OR MORE COMPS			**X 0.4 = _____**	
G. AVERAGE GRADE FOR 3 BEHAVIOR EVALUATIONS			**X 0.4 = _____**	
H. AVERAGE GRADE: HOSP & DEPT ORIENTATION + MONTHLY JOURNAL			**X 0.1= _____**	
2 IMAGE/EXAM CRITIQUE SESSIONS	_____		**X 0.1= _____**	
Average of 1 exam critique: first session	_____			
Average of 1 exam critique: second session	_____			
I. ANY ADJUSTMENTS FOR COMPS NOT COMPLETED, INITIATIVE, CHRONIC TARDINESS,				
CHRONIC ABSENTEEISM, OR CLINICAL TIME NOT MADE UP				
INITIATIVE ADJUSTMENT SCALE (points deducted from final number grade)				
29 exams completed displaying average initiative (-20 pts.)				
(Specifically completing 21 "M" Comps & 8 "E" Comps)				
33 exams completed displaying above average initiative (-10 pts.)				
(Specifically completing 23 "M" Comps & 10 "E" Comps)				
38 or more exams completed displaying excellent initiative (-0 pts.)				
(Specifically completing 25 "M" Comps & at least 13 "E" Comps)				

J. FINAL GRADE (ADD F, G, H & I)				

RAD 332 CLINIC 2 GRADE SHEET

A. DOSIMETER & HOLDER RETURNED ON:

B. NUMBER OF FALL MANDATORY COMPS TO BE COMPLETED
NEED A TOTAL OF 39 MANDATORY

C. NUMBER OF FALL ELECTIVE COMPS TO BE COMPLETED
NEED A TOTAL OF 25 ELECTIVE

D. ANY MANDATORY OR ELECTIVE NOT COMPLETED _____

E. TOTAL NUMBER MANDATORY COMPS FALL SEMESTER _____

F. TOTAL NUMBER OF ELECTIVE COMPS FALL SEMESTER_____

TOTAL COMPS =_____

ADVANCED MODALITY ROTATIONS COMPLETED YES/NO

G. AVERAGE GRADE FOR ALL COMPS X.35 =

H. AVERAGE GRADE FOR 3 BEHAVIOR EVALUATIONS X.40=

1st Behavioral Evaluation:
2nd Behavioral Evaluation:
3rd Behavioral Evaluation:

I. COMPLETED HOSPITAL & DEPARTMENT ORIENTATIONS, Film Critique X.10=

J. ANY ADJUSTMENTS FOR COMPS NOT COMPLETED, INITIATIVE OR CLINICAL TIME NOT MADE UP

INITIATIVE ADJUSTMENT SCALE
12 Elective Comps completed (average initiative demonstrated) (-20 pts.)
15 Comps completed (above average initiative demonstrated) (-10 pts.)
18 or more Comps completed (excellent initiative demonstrated) (-0) pts.)

K. AVERAGE GRADE ON 4 SELF- STUDY REGISTRY STUDY GUIDES X.15

PATIENT CARE (STUDY GUIDE #1) %
Image Production (Study Guide #2) %
Imaging Procedures Part 1 (Study Guide #3A) %
Imaging Procedures Part 2 (Study Guide #3B) %

L. FINAL GRADE (ADD G, H, I, & K)

APPENDIX P

SPECIAL ROTATION OBJECTIVES
(Advanced Modality Rotation Objectives)

ANGIOGRAPHY & SPECIAL PROCEDURE OBJECTIVES
CATEGORY 8--COMPETENCY

Neatly type (word-process) all answers and submit to your SIUC faculty. The use of the Adler/Carlton physics book, Merrill's Atlas volume 3, and the student's patient care book is strongly encouraged.

Upon completion of this rotation, the student shall be able to:

1. Describe the gowning and gloving to maintain a sterile field.

2. Describe the differences between disinfection, aseptic technique, and sterilization.

3. List the sterile apparel to be worn during an invasive procedure.

4. Maintain a sterile field, with 100% accuracy, in setting up a sterile tray for an angiogram.

5. Maintain a sterile field with 100%accuracy in loading the automatic injector.

6. List and describe the steps for regional site preparation (entry site preparation), for an invasive or special procedure.

7. Describe 4 uses of catheters.

8. Describe the advantages and disadvantages of reusable and disposable supplies.

9. Correctly use the digital imaging system at this facility.

10. Distinguish between acceptable and unacceptable image densities.

11. Define the following terms related to interventional procedures.

a.	image subtraction	g.	intraluminal stenting
b.	Seldinger technique	h.	fibrinolysis
c.	pulse oximetry	i.	atherectomy
d.	angiography	i.	venography
e.	embolization	k.	vasodilator
f.	angioplasty	l.	ablation

12. Of the following nonvascular interventional procedures, list the procedures perform in your department.
    a. needle biopsy

(1)	bone	(4)	abscessed regions
(2)	lung	(5)	biliary system
(3)	abdomen	(6)	genitourinary system

    b. extracorporeal shock wave lithotripsy (ESWL)

    c. endoscopic retrograde cholangiopancreatography (ERCP)

d. percutaneous needle puncture for drainage
e. percutaneous calculi removal
   (1) kidney
   (2) biliary system

13. Describe the difference between the construction of an artery and the construction of a vein.

14. Explain the indications and contraindications for nonionic iodinated contrast medium use in the interventional suite.

15. Discuss the purposes of the following tests:
   a. activated partial thromboplastin time (APTT)
   b. partial thromboplastin time (PTT)
   c. prothrombin time (PT)
   d. glomerular filtration rate (GFR)
   e. hematocrit
   f. creatinine
   g. BUN

16. Identify the specific complications related to angiographic, interventional or special procedures, including:
   a. transient ischemic attack (TIA)
   b. stroke
   c. embolism, solid and air
   d. thrombosis
   e. myocardial infarction (MI)
   f. congestive heart failure (CHF)
   g. cardiac arrythmia
   h. vasovagal response
   i. anaphylaxis
   j. hypotensive episode
   k. hypertensive episode
   l. renal failure
   m diabetic crisis
   n. paralysis

17. Identify 3 indications and 2-3 contraindications for:
   a. Hysterosalpingography
   b. Myelography
   c. Arthrography
   d. Sialography

18. List the type of contrast medium (contrast agent) used for:
   a. Hysterosalpingography
   b. Myelography
   c. Arthrography
   d. Sialography

19. List the post exam patient care procedures, used at your facility, for.
   a. Hysterosalpingography
   b. Myelography
   c. Arthrography
   d. Sialography

ANGIOGRAPHY & SPECIAL PROCEDURES
STUDENT EVALUATION

A = Always F = Frequently S = Sometimes N = Never

Objective Test Score _____

		A	F	S	N	Comments
1.	The student was on time.	☐	☐	☐	☐	
2.	The student's appearance was professional.	☐	☐	☐	☐	
3.	The student showed concern for the patients.	☐	☐	☐	☐	
4.	The student asked questions.	☐	☐	☐	☐	
5.	The student participated in activities with the the equipment and in patient care as directed by the instructor.	☐	☐	☐	☐	
6.	The student satisfactorily answered the objectives for this modality rotation.	☐	☐	☐	☐	

_____
Student

_____ _____
Evaluator Date

COMPUTED TOMOGRAPHY (CT) OBJECTIVES
CATEGORY 8 – COMPETENCY

Neatly type (word-process) all answers and submit to your SIUC faculty. The use of the Adler/Carlton physics book, Merrill's Atlas volume 3, and the student's Patient Care book is strongly encouraged.

Upon completion of this rotation and with 100% accuracy, the student shall be able to:

1. At your facility, list the manufacturer, model of the CT scanner, x-ray tube and detector system (e.g., multi-channel detectors) .

2. Prepare a chart listing the following body parts and include: (OK to use a spreadsheet)
   (1) intravenous contrast agent used: List specific brand name and amount injected
   (2) scan range (from anatomical part "x" to anatomical part "y")
   (3) patient preparation (where applicable)
   (4) imaging parameters (kVp, mA, time or mAs)
   (5) room preparation*

   a. brain
   b. bony head/face
   c. bony vertebral column
   d. abdomen
   e. pelvis
   f. chest/heart
   g. neck

3. On the computer monitor, identify the following anatomic structures, in the head, as visualized using a coronal and/or sagittal scanning technique.
   a. bone
   b. gray matter
   c. white matter
   d. lateral ventricles, including frontal horns, occipital horns & temporal horns.
   e. cranial sutures, including the pterion, asterion, lambda, & bregma
   f. cerebrum
   g. cerebellum
   h. brain stem
   i. tentorium cerebella
   j. EAM

4. Explain why a CT scan provides more bony diagnostic information than an MRI scan. (In other words, please list 2 reasons why a CT scan is performed instead of an MRI scan).

5. On the computer monitor, distinguish between the following abdominal and pelvic organs.
   a. psoas muscles
   b. IVC
   c. abdominal aorta
   d. ureters
   e. kidneys
   f. urinary bladder
   g. adrenal glands
   i. diaphragm, including the crus
   j. liver/gall bladder
   k. stomach
   l. pancreas
   m. colon
   n. lumbar spine
   o. small bowel

h. spleen
p. uterus/prostate gland

6. Prior to injecting the patient with an intravenous contrast agent, explain the rationale for including the following information in the patient's clinical history data (medical chart; electronic medical record).
   a. previous contrast agent reaction
   b. contrast agent related allergies
   c. BUN (blood, urea nitrogen)—what physiological function does BUN measure?
      (1) list the average BUN range for an adult male
      (2) list the average BUN range for an adult female
   d. Creatinine—what physiological function does Creatinine measure?
      (1) list the average Creatinine range for an adult male
      (2) list the average Creatinine range for an adult female
   e. Glomerular filtration rate (GFR) —what physiological function does GFR measure?
      (1) list the average GFR range for an adult male
      (2) list the average GFR range for an adult female

7. In terms of a reaction to an iodinated-contrast agent that is given intravenously, please define and list 2 examples of each reaction.
   a. mild reaction
   b. moderate reaction
   c. severe reaction

8. List the medication that is given to stop the following reactions to an iodinated-contrast agent that is given intravenously.
   a. mild reaction
   b. moderate reaction
   c. severe reaction

*2.(5) Here are some examples of room preparation items to include (where applicable) in your answer:
--clean room; fresh pillowcase & fresh sheet on gantry couch
--venipuncture supplies & contrast agent set out; power injector ready for loading
--contrast agent questionnaire/allergy history form ready for use
--radiolucent cushion for head or legs
--warm blanket
--immobilization device for arm during venipuncture/contrast injection
--immobilization device for head, face, extremity during CT scan
--padded arm support for chest & abdomen/pelvis scanning

CT SCANNING OBJECTIVES
STUDENT EVALUATION

A = Always F = Frequently S = Sometimes N = Never

Objective Test Score_____

		A	F	S	N	Comments
1.	The student was on time.	☐	☐	☐	☐	
2.	The student's appearance was professional.	☐	☐	☐	☐	
3.	The student showed concern for the patients.	☐	☐	☐	☐	
4.	The student asked questions.	☐	☐	☐	☐	
5.	The student participated in activities with the equipment and in patient care as directed by the instructor.	☐	☐	☐	☐	
6.	The student satisfactorily answered the objectives for this modality rotation.	☐	☐	☐	☐	

_____
Student

_____ _____
Evaluator Date

MAGNETIC RESONANCE IMAGING (MRI) OBJECTIVES
CATEGORY 8--COMPETENCY

Neatly type (word-process) all answers and submit to your SIUC faculty. The use of the Adler/Carlton physics book, Merrill's Atlas volume 3, and the student's patient care book is strongly encouraged.

Upon completion of this rotation, the student shall be able to:

1. List the manufacturer, model, magnet type and magnetic field strength of the MRI scanner(s) used at this facility.

2. Explain the differences in the following types of magnets, used in MRI.
   a. resistive magnet
   b. permanent magnet
   c. superconducting magnet

3. Define these terms related to magnetic resonance imaging (MRI).
   a. Tesla/Gauss
   b. Larmor frequency
   c. 5 Gauss line
   d. phase gradient
   e. frequency gradient
   f. K-space
   g. TR (relaxation time)
   h. TE (echo time)
   i. TI (inversion time)
   j. Flip angle

4. Define the following pulse sequences relate to MRI.
   a. spin echo
   b. gradient echo
   c. inversion recovery
   d fast spin echo

5. List at least 5 of the most common conditional or unsafe devices that must be screened prior to a patient getting an MRI exam.

6. Discuss how to manage the following patient conditions in an MRI environment.
   a. pregnancy
   b. claustrophobia
   c. kidney function (GFR) and contrast administration

7. Define the following MRI artifacts that may be seen on the monitor in the control booth.
   a. aliasing
   b. ghosting
   c. truncation
   d. chemical shift
   e. partial volume averaging

8. On the computer monitor, locate these anatomic structures, in the brain/spinal cord, as visualized when using a midline sagittal (midline longitudinal) imaging technique:
   a. bone
   b. gray matter
   c. white matter
   d. intervertebral disks & vertebrae
   e. fat/subcutaneous fat
   f. tentorium cerebelli
   f. cerebrospinal fluid (CSF)
   g. blood
   h. cerebrum
   i. cerebellum
   j. brain stem

9. On the following MRI scans, please list and define a common pathology that each MRI scan best demonstrates. (Each of these MRI scans will best demonstrate a different pathology).
   a. brain
   b. lumbar spine
   c. knee

10. Prepare a chart listing the most common pulse sequence used at your facility, for the body areas listed below. Include the following imaging parameters: (OK to use a spreadsheet)

    (1) TR
    (2) TE
    (3) FA
    (4) slice thickness
    (5) imaging gap
    (6) name of contrast medium used
    (7) type of RF receiving coil used

    a. Brain for cerebral circulation (cerebral blood flow)
    b. Lumbar Spine for disc rupture (herniation)
    c. Cervical Spine for disc compression
    c. Knee for meniscus tear
    d. Shoulder for rotator cuff tear
    e. Abdomen
    f. Pelvis

MRI SCANNING OBJECTIVES
STUDENT EVALUATION

A = Always F = Frequently S = Sometimes N = Never

Objective Test Score_____

		A	F	S	N	Comments
1.	The student was on time.	☐	☐	☐	☐	
2.	The student's appearance was professional.	☐	☐	☐	☐	
3.	The student showed concern for the patients.	☐	☐	☐	☐	
4.	The student asked questions.	☐	☐	☐	☐	
5.	The student participated in activities with the equipment and in patient care as directed by the instructor.	☐	☐	☐	☐	
6.	The student satisfactorily answered the objectives for this modality rotation.	☐	☐	☐	☐	

_____
Student

_____ _____
Evaluator Date

MAGNETIC RESONANCE (MR) SAFETY SCREENING PROTOCOL

For the RAD 222 Student

WARNING:

An MR room has a very strong magnetic field that may be hazardous to individuals entering the MR environment if they have certain metallic, electronic, magnetic, or mechanical implants, devices, or objects. Therefore, all students are required to fill out this form before going to their clinical internship. Be advised, the MR system magnet is ALWAYS on.

While assisting in the MR environment, should an SIUC Radiologic Sciences student feel any intolerable pulling, unnatural heat or burning sensation within himself/herself then the student must leave the MR environment as quickly as possible, to prevent personal injury.

Do not enter the MR environment or MR system room if you have any question or concern regarding an implant, device, or object.

Please indicate if you have any of the following known MR hazardous devices:

- ❑ Aneurysm clip(s)
- ❑ Cardiac pacemaker
- ❑ Implanted cardioverter defibrillator (ICD)
- ❑ Electronic implant or device
- ❑ Magnetically-activated implant or device
- ❑ Neurostimulation system
- ❑ Spinal cord stimulator
- ❑ Cochlear implant or implanted hearing aid
- ❑ Insulin or infusion pump
- ❑ Implanted drug infusion device
- ❑ Any type of prosthesis, implant or tattoo
- ❑ Artificial or prosthetic limb
- ❑ Any imbedded metallic fragment, shrapnel wound(s), foreign body, or piercing
- ❑ Any external or internal metallic object
- ❑ Hearing aid
- ❑ Implanted spine straightening rods
- ❑ Other implant_____
- ❑ Other device_____

Please indicate below if you have not specified any of the above:

- ❑ I have not received any implants, shrapnel, devices, or objects to the best of my knowledge.

I attest that the above information is correct to the best of my knowledge. I have read and understand the entire contents of this form and have had the opportunity to ask questions regarding the information on this form.

_____ _____

Student Signature Date

MAGNETIC RESONANCE (MR) SAFETY SCREENING PROTOCOL

For the RAD 332 Student

WARNING:

An MR room has a very strong magnetic field that may be hazardous to individuals entering the MR environment if they have certain metallic, electronic, magnetic, or mechanical implants, devices, or objects. Therefore, all students are required to fill out this form before going to their clinical internship. Be advised, the MR system magnet is ALWAYS on.

While assisting in the MR environment, should an SIUC Radiologic Sciences student feel any intolerable pulling, unnatural heat or burning sensation within himself/herself then the student must leave the MR environment as quickly as possible, to prevent personal injury.

Do not enter the MR environment or MR system room if you have any question or concern regarding an implant, device, or object.

Please indicate if you have any of the following known MR hazardous devices:

- ❑ Aneurysm clip(s)
- ❑ Cardiac pacemaker
- ❑ Implanted cardioverter defibrillator (ICD)
- ❑ Electronic implant or device
- ❑ Magnetically-activated implant or device
- ❑ Neurostimulation system
- ❑ Spinal cord stimulator
- ❑ Cochlear implant or implanted hearing aid
- ❑ Insulin or infusion pump
- ❑ Implanted drug infusion device
- ❑ Any type of prosthesis, implant or tattoo
- ❑ Artificial or prosthetic limb
- ❑ Any imbedded metallic fragment, shrapnel wound(s), foreign body, or piercing
- ❑ Any external or internal metallic object
- ❑ Hearing aid
- ❑ Implanted spine straightening rods
- ❑ Other implant_____
- ❑ Other device_____

Please indicate below if you have not specified any of the above:

- ❑ I have not received any implants, shrapnel, devices, or objects to the best of my knowledge

---

I attest that the above information is correct to the best of my knowledge. I have read and understand the entire contents of this form and have had the opportunity to ask questions regarding the information on this form.

_____ _____

Student Signature Date

NUCLEAR MEDICINE OBJECTIVES
CATEGORY 8—COMPETENCY

Neatly type (word-process) all answers and submit to your SIUC faculty. The use of the Adler/Carlton physics book, Merrill's Atlas volume 3, and the student's patient care book is strongly encouraged.

1. Name four different radionuclides, listing each physical half-life and how each is used in nuclear medicine studies.

2. Describe the radiation protection procedures used when handling radionuclides as well as how to limit your exposure to radiation.

3. Explain what the following pieces of equipment are and how they are used in nuclear medicine.
   a. Dose calibrator

   b. Geiger-Muller counter

4. What is Tc99-m? What is the name of its parent radionuclide?

5. List 5 Tc99-m radiopharmaceuticals agents and their application.

6. Describe how physical and biological half-lives play a role in the remove of Radionuclides from the body.

7. Name three differences between nuclear medicine imaging and x-rays.

8. Prepare a chart that includes: (OK to use a spreadsheet).

   a. Identify one purpose for each of the following studies:

(1) heart	(4) lung	(7) gallbladder
(2) bone	(5) liver	(8) stomach
(3) kidney	(6) thyroid	(9) brain

   b. Given the organs listed above (8a, items 1-9):
      (1) List 2-3 pathologies of this organ diagnosed by nuclear medicine.
      (2) State the radionuclide and biological tag (carrier molecule) used.
      (3) List the patient preparation for each exam.

	Purpose	Pathologies	Bio-tag	Patient Prep
Heart				
Bone				
Kidney				
Lung				
Liver				
Thyroid				
Gallbladder				
Stomach				
Brain				

NUCLEAR MEDICINE
STUDENT EVALUATION

A = Always F = Frequently S = Sometimes N = Never

Objective Test Score _____

		A	F	S	N	Comments
1.	The student was on time.	☐	☐	☐	☐	
2.	The student conforms to the professional dress code of the institution.	☐	☐	☐	☐	
3.	The student showed concern for the wellbeing of the patients.	☐	☐	☐	☐	
4.	The student asked questions concerning patient imaging procedures.	☐	☐	☐	☐	
5.	The student participated in patient care or other duties as directed by the instructor.	☐	☐	☐	☐	
6.	The student satisfactorily answered the objectives for this modality rotation.	☐	☐	☐	☐	

_____
Student

_____ _____
Evaluator Date

RADIATION THERAPY OBJECTIVES
CATEGORY 8--COMPETENCY

Neatly type (word-process) all answers and submit to your SIUC faculty. The use of the Adler/Carlton physics book, Merrill's Atlas volume 3, and the student's patient care book is strongly encouraged.

Upon completion of this rotation, the student shall be able to:

1. Describe how a treatment field is determined.

2. Identify how a treatment dose is determined.

3. What is the purpose of dose fractionation?

4. Identify the source of radiation used for the most common cancers treated at this facility.

5. Define the following terms related to radiation therapy.
   a. bolus
   b. blocks
   c. wedges
   d. filters
   e. Cerrobend
   f. multileaf collimation (MCL)
   g. image guided radiation therapy (IGRT)
   h. intensity-modulated radiation therapy (IMRT)
   i. POP field
   j. Four-field box

6. Explain the need for frequent port films or on board imaging (electronic portal imaging devices (EPID)).

7. Explain the need for the patient restraint devices used in radiation therapy.

8. Describe the radiation protection procedures used in radiation therapy at this facility.

9. List 2-3 local or systemic reactions to radiation therapy treatments of the following areas.
   a. head
   b. neck
   c. lung
   d. pelvis
   e. abdomen
   f. breast
   g. chest

10. Identify/describe the different treatment aids that are used in radiation therapy. i.e wedges, MLC, positioning devices, immobilization devices, etc.

11. Explain the difference between a positioning device and an immobilization device.

RADIATION THERAPY
STUDENT EVALUATION

A = Always F = Frequently S = Sometimes N = Never

Objective Test Score _____

		A	F	S	N	Comments
1.	The student was on time.	☐	☐	☐	☐	
2.	The student conforms to the professional dress code of the institution.	☐	☐	☐	☐	
3.	The student showed concern for the wellbeing of the patients.	☐	☐	☐	☐	
4.	The student asked questions concerning patient treatment.	☐	☐	☐	☐	
5.	The student participated in patient care or other duties as directed by the instructor.	☐	☐	☐	☐	
6.	The student satisfactorily answered the objectives for this modality rotation.	☐	☐	☐	☐	

_____
Student

_____ _____
Evaluator Date

SONOGRAPHY OBJECTIVES
CATEGORY 8--COMPETENCY

Neatly type (word-process) all answers and submit to your SIUC faculty. The use of the Adler/Carlton physics book, Merrill's Atlas volume 3, and the student's patient care book is strongly encouraged.

Upon completion of this rotation, the student shall know or be able to:

1. Define sonography.

2. How does sonography differ from radiography? List three pros and cons.

3. Briefly explain the function of a transducer and its use in sonography.

4. Discuss the need for the use of acoustic coupling gel.

5. List three types of exams/body parts which would require the use of a high frequency transducer and briefly explain why.

6. There are many areas a sonographer may specialize or become registered in. List five and briefly describe each.

7. Define the following sonographic terms. Give two anatomical or structural examples of each (For example: a simple cyst is anechoic)
   a. Anechoic
   b. Echogenic
   c. Hyperechoic
   d. Homogeneous
   e. Heterogeneous
   f. Isoechoic

8. List the patient preps for the following exams and explain the purpose for each.
   a. Abdomen Complete
   b. Thyroid
   c. Renal Artery
   d. Pelvis (Transabdominal)
   e Pelvis (Transvaginal)
   f. OB 1st Trimester
   g. OB 2nd/3rd Trimester

9. A patient presents in your department for an Upper GI and a Gallbladder Ultrasound. Which study should be performed first? Why?

10. Briefly explain the main differences between 2D, 3D, and 4D ultrasound.

SONOGRAPHY
STUDENT EVALUATION

A = Always F = Frequently S = Sometimes N = Never

Objective Test Score _____

		A	F	S	N	Comments
1.	The student was on time.	☐	☐	☐	☐	
2.	The student's appearance was professional.	☐	☐	☐	☐	
3.	The student showed concern for the patients.	☐	☐	☐	☐	
4.	The student asked questions concerning the scanning techniques used to examine the patients.	☐	☐	☐	☐	
5.	The student participated in patient care or other duties as directed by the instructor.	☐	☐	☐	☐	
6.	The student satisfactorily answered the objectives for this modality rotation.	☐	☐	☐	☐	

_____
Student

_____ _____
Evaluator Date

APPENDIX Q

CLINICAL GRADING PROCESS
with
CLINICAL GRADING SHEETS

CLINICAL GRADING PROCESS

CHECK TIME SHEET

1. Are all tardies and/or absences made up?

2. From final clinical grade, deduct 5 points for each late arrival not made up.

3. If three to four (3-4) days are missed, **AND** there is no evidence of any clinical day make-up schedule, then decrease final clinical grade by 10 points.

4. If five to seven (5-7) days are missed **AND** there is no evidence of any clinical day make-up schedule, then; decrease final clinical grade by 20 points.

5. If **more than** seven (7) days are missed **AND:**
   a. there is no evidence of any clinical day make-up schedule, **AND**,
   b. the student made no attempt to discuss the cause of the absences with Program faculty,
   c. the student will be dismissed from the program.

6. Is Time Sheet signed by Clinical Instructor?

USING APPROPRIATE CLINICAL GRADING SHEET

1. On the RAD 222/RAD 332 Competency Check List, inspect for proper recording of the exam date, Pt or SIM, and the initials of the RT who Comped the student.

2. Determine competency for **each exam;** both Mandatory ("M") exams, Elective ("E") exams & Program Required exams (PR; second clinical semester).
   a. Examine each exam Comp form for completeness:
      (1) Is each projection that was performed identified?
      (2) Was each projection evaluated and signed by a qualified RT?
      (3) Exam met minimum requirements for competency = 100%

BEHAVIOR RATING

1. Are there at least two to three (2-3) Behavior Ratings?

2. Are all Behavior Ratings signed by both student and Clinical Instructor?

3. Using Behavior Rating code sheet, determine grade for each of the 2-3+ Behavior Ratings and place average grade on line E on Clinical Grading Sheet (see page 167, as example/ discussion continues).

4. Calculate the weighted score for the total number of Behavior Evaluations completed
   257/3 = 85.67 x 0.5 = 42.83

5. Add the 2 weighted scores together, and make any adjustments for time missed if necessary, then, place final numerical grade on line G.
   47.83 + 42.83 = 90.36

6. Use RADS Program grading scale to determine letter grade.

RAD 222—SPRING CLINICAL SEMESTER
GRADING SHEET

Category 1 (5-8 different "M" exams)

A. Adult Trauma Upper Extremity M
B. Bone Age (Hand & Wrist, only) E
C. Elbow w/; w/o Coyle Projection M
D. Finger(s) M
E. Forearm M
F. Hand M
G. Humerus M
H. Shoulder – Non-Trauma: M
   1 Shoulder exam that has a variation of these 5 Projections:
   (1 Comp = 2-5 images)
   1. Int./Ext. Rot. Images only
   2. Int./Ext. Rot. Images w/Scap Y
   3. Int./Ext. Rot. Images w/Axial
   4. Int./Ext. Rot. Images w/Grashey
   5. Grashey, Scap Y w/; w/o Axial
I. Thumb M
J. Trauma Shoulder: M
   1 Trauma Shoulder exam that has a variation of these 6 Projections:
   (1 Comp = 2-6 images)
   1. Grashey w/Scap. "Y"
   2. Grashey w/Axial
   3. Grashey, Scap "Y" & Axial
   4. Grashey & Transthoracic Lat.
   5. Int./Ext. Rot. Images w/any of the above 4 Projections.
K. Wrist w/; w/o Scaphoid Image M

Category 2 (5-8 different "M" exams)

A. Adult Trauma Lower Extremity M
B. Ankle M
C. Bone Age (Hand, Wrist, Hip) E
D. Calcaneus (Os Calcis/Heel) E
E. Femur M
F. Foot M
G. Hip
   1. AP w/Frog-leg Lateral M
   2. AP w/X-Table Lateral M
H. Knee w/; w/o Sunrise Patella M
I. Oblique Knee – not Routine E
J. Long Bone Measurements E
K. Lower Leg (Tib-Fib) M
L. Patella (Pa, Lat & Sunrise) E
M. Toe(s) E
N. Wgt-Bearing Foot E
O. Wgt-Bearing Hip E
P. Wgt-Bearing Knee E

Category 3 (4-5 different "M" exams)

A. Cervical Sp. w/; w/o Swimmers M
B. Coccyx E
C. Flex & Extend C-Spine only E
D. Flex & Extend LS-Spine only E
E. Lumbar Spine M
F. Pelvis M
G. Pelvis w/Judet Images of Ilia E
H. Pelvis w/Inlet & Outlet Images E
I. S-I Jts w/Axial Sacrum E
J. Sacrum E
K. Scoliosis Series E
L. Skeletal/Bone Survey (for Mets) E
M. Thoracic Sp. w/; w/o Swimmers M
N. Trauma Cervical Sp (X-Table Lateral w/; w/o AP & Odontoid) M

Category 4 (5-7 different "M" exams)

A. Geriatric Chest M
C. Geriatric Upper or Lower Extremity M
D. Child/Infant Chest M
E. Child Trauma Upper/ Lower Extremity E
G. Child Abd Series w/; w/o CXR E
H. Child/Infant Sup. Rec. KUB E
I. Adult Chest M
J. Wheelchair or Stretcher Chest M
K. Decub Chest-1 Image E
L. Lordotic Chest – 1 Image E
M. Abdomen Series w/; w/o CXR M
N. Adult Supine Recumbent KUB M
O. Decub Abdomen – 1 Image E
P. Erect Abdomen - 1 Image M
Q. Soft Tissue Neck w/; w/o Contrast E

R. Mod. BaSw for Video Pathology E
S. Esophogram/Ba Swallow E
T. Upper GI w/; w/o Air Contrast M
U. Small Bowel E/PR
V. Colon w/; w/o Air Contrast E
W. IVP w/; w/o tomos E

Category 5 (1-2 different "M" exams)

A. A-C Joints E
B. Clavicle M
C. Ribs w/; w/o Erect CXR M
D. Scapula E
E. Sternum E
F. S-C Joints E

Category 6 (2-8 different "E" exams)

A. Skull E
B. Sinuses E
C. Facial Bones w/; w/o Zygoma E
D. Nasal Bones E
E. TMJs w/; w/o tomos E
F. Orbits (Bony or FB) E
G. Mandible/Panorex Mandible E
H. Mastoids E
I. Optic Foramen E
J. Sella Turcica E

Category 7 (1-4 different "M" exams)

A. Angiogram w/; w/o Intervention
1. Cerebral E
2. Renal/Systemic E
3. Aortic Arch/Cath Lab E
4. Femoral/A-I-F run off E

B. Arthrogram
1. Ankle/Knee/Hip E
2. Elbow/Wrist E
3. Shoulder E
4. TMJs E

C. Bone Densitometry
1. Unit Calibration, **PLUS**:
2. Hip & Lumbar Sp w/; w/o E
3. Forearm & Wrist E

D. Cysto/Retro. Pyelogram E
E. ERCP/Lithotripsy E
F. Fistulogram E
G. IV Cholangiogram w/; w/o tomos E
H. Lumbar Puncture in R/F/ Room E
I. Myelography
J. Post-Mortem Exam in R/F room E
K. T-Tube Cholang./PTC E
L. Tomography (not kidneys) E
M. Voiding Cysto (VCU/VCUG) E

N. Venogram (w/; w/o Intervention)
1. Peripheral (Arm/Leg) E
2. Renal E
3. Lumbar E
4. IVC E

O. Portables/Recovery Room Portables
1. Head work E
2. Spine work E
3. Extremity (Adult) M
4. Abdomen (Adult) M
5. Chest (Adult) M
6. Child Port. CXR E
7. Child Port. Abd. E
8. Child Port. Extremity E
9. Post-Mortem Exam in Morgue E

P. Surgery Portables
1. Colonoscopy/Endoscopy E
2. Orthopedic/Fx Reduction (ORIF) E
3. Laminectomy E
4. OR Cholang./Chole Lap E
5. Hip Replacement/Pinning E
6. Pacemaker/Porta Cath/PICC Line/ Swan-Ganz/CVP Line E
7. Declot Angiogram E
8. Epidural Facet Injection E
9. Vertebroplasty E

Q. C-Arm Work in OR
1. Colonoscopy/Endoscopy E
2. Orthopedic/Fx Reduction (ORIF) M
3. Laminectomy E
4. OR Cholang./Chole Lap E
5. Hip Replacement/Pinning E
6. Pacemaker/Porta Cath/PICC Line/ Swan-Ganz/CVP Line E

w/; w/o = with or without;
R/F room = X-ray & Fluoro room combo

7. Declot Angiogram E
8. Epidural Facet Injection E
9. Vertebroplasty E

R. Vertebroplasty in R/F room E

S. PICC Line Insertion in R/F room E

w/; w/o = with or without;
R/F room = X-ray & Fluoro room combo

RAD 332—FALL CLINICAL SEMESTER
GRADING SHEET

Category 1 (5-8 different "M" exams)

A. Adult Trauma Upper Extremity M
B. Bone Age (Hand & Wrist, only) E
C. Elbow w/; w/o Coyle Projection M
D. Finger(s) M
E. Forearm M
F. Hand M
G. Humerus M
H. Shoulder – Non-Trauma: M
1 Shoulder exam that has a variation of these 5 Projections:
(1 Comp = 2-5 images)
1. Int./Ext. Rot. Images only
2. Int./Ext. Rot. Images w/Scap Y
3. Int./Ext. Rot. Images w/Axial
4. Int./Ext. Rot. Images w/Grashey
5. Grashey, Scap Y w/; w/o Axial

I. Thumb M
J. Trauma Shoulder: M
1 Trauma Shoulder exam that has a variation of these 6 Projections:
(1 Comp = 2-6 images)
1.Grashey w/Scap. "Y"
2.Grashey w/Axial
3. Grashey, Scap "Y" & Axial
4. Grashey & Transthoracic Lat.
5. Int./Ext. Rot. Images w/any of the above 4 Projections.

K. Wrist w/; w/o Scaphoid Image M

Category 2 (Finish "M" Comps)

A. Adult Trauma Lower Extremity M
B. Ankle M
C. Bone Age (Hand, Wrist, Hip) E
D. Calcaneus (Os Calcis/Heel) E
E. Femur M
F. Foot M
G. Hip
1. AP w/Frog-leg Lateral M
2. AP w/X-Table Lateral M

H. Knee w/; w/o Sunrise Patella M
I. Oblique Knee – not Routine E
J. Long Bone Measurements E
K. Lower Leg (Tib-Fib) M
L. Patella (Pa, Lat & Sunrise) E
M. Toe(s) E
N. Wgt-Bearing Foot E
O. Wgt-Bearing Hip E
P. Wgt-Bearing Knee E

Category 3 (Finish "M" Comps)

A. Cervical Spine w/; w/o Swimmers M
B. Coccyx E
C. Lumbar Spine M
D. Pelvis M
E. S-I Joints E
F. Sacrum E
G. Scoliosis Series E
H. Skeletal/Bone Survey (for Mets) E
I. Thoracic Spine w/; w/o Swimmers M
J. Trauma Cervical Sp (X-Table Lat. w/; w/o AP & Odontoid) M

Category 4 (Finish "M" Comps)

A. Geriatric Chest M
B. Geriatric Lower Extrem (Not Hip) M
C. Geriatric Upper Extremity M
D. Child/Infant Chest M
E. Child Trauma Upper Extremity E
F. Child Trauma Lower Extremity E
G. Child Abd Series w/; w/o CXR E
H. Child/Infant Sup. Rec. KUB E
I. Adult Chest M
J. Wheelchair or Stretcher Chest M
K. Decub Chest-1 Image E
L. Lordotic Chest – 1 Image E
M. Abdomen Series w/; w/o CXR M
N. Adult Supine Recumbent KUB M
O. Decub Abdomen – 1 Image E
P. Erect Abdomen - 1 Image M
Q. Soft Tissue Neck w/; w/o Contrast E
R. Mod. BaSw for Video Pathology E
S. Esophogram/Ba Swallow E
T. Upper GI w/; w/o Air Contrast M
U. Small Bowel E/PR
V. Colon w/; w/o Air Contrast E
W. IVP w/; w/o tomos E

Category 5 (Finish "M" Comps)

A. A-C Joints E
B. Clavicle M

C. Ribs w/; w/o Erect CXR M
D. Scapula E
E. Sternum E
F. S-C Joints E

Category 6 (2-8 different "E" Comps)

A. Skull E
B. Sinuses E
C. Facial Bones w/; w/o Zygoma E
D. Nasal Bones E
E. TMJs w/; w/o tomos E
F. Orbits (Bony or FB) E
G. Mandible/Panorex for Mandible E
H. Zygomatic Arches E

Category 7 (Finish "M" Comps)

A. Angiogram w/; w/o Intervention
1. Cerebral E
2. Renal/Systemic E
3. Coronary/Cath Lab E
4. Femoral/A-I-F run off E
5. Aortic Arch E

B. Arthrogram
1. Ankle E
2. Elbow E
3. Hip E
4. Knee E
5. Shoulder E
6. TMJs E
7. Wrist E

C. Bone Densitometry
1. Unit Calibration, PLUS:
2. Hip & Lumbar Spine w/; w/o E
3. Forearm & Wrist E

D. Cysto/Retro. Pyelogram E
E. ERCP/Lithotripsy E
F. Fistulogram E
G. Hysterosalpingogram (HSG) E
H. Lumbar Puncture in R/F room E
I. Myelography
1. Cervical Myelogram E
2. Thoracic Myelogram E
3. Lumbar Myelogram E
J. ECG (EKG)-12 Lead E
K. Sialogram E
L. T-Tube Cholang./PTC E
M. Tomography (not kidneys) E
N. Voiding Cysto (VCU/VCUG) E

O. Venogram (w/; w/o Intervention)
1. Peripheral (Arm/Leg) E
2. Renal E
3. Lumbar E
4. IVC E

P. Portables/Recovery
1. Head work E
2. Spine work E
3. Extremity M
4. Abdomen M
5. Chest M
6. Child/Inf. Abdomen E
7. Child/Inf. Chest E
8. Child/Inf. Extremity E

Q. Surgery Portables
1. Colonoscopy/Endoscopy E
2. Fx Reduction (ORIF) E
3. Laminectomy E
4. OR Cholang./Chole Lap E
5. Hip Replacement/Pinning E
6. Pacemaker/Porta Cath/PICC/ Swan-Ganz/CVP Line E
7. Declot Angiogram E
8. Epidural Facet Injection E
9. Vertebroplasty

R. C-Arm Work in OR
1. Colonoscopy/Endoscopy E
2. Fx Reduction (ORIF) M
3. Laminectomy E
4. OR Cholang./Chole Lap E
5. Hip Replacement/Pinning E
6. Pacemaker/Porta Cath/PICC/ Swan-Ganz/CVP Line E
7. Declot Angiogram E
8. Epidural Facet Injection E
9. Vertebroplasty E

S. Vertebroplasty in R/F room E
T. Post-Mortem Exam in Morgue E
U. Post-Mortem Exam in R/F room

Category 8 (min. 4 Program Required Rotations (PR))

A. Angiography/Internvent. Procedures E
B. Computed Tomography (CT) PR
C. Magnetic Resonance Imaging (MRI) PR
D. Nuclear Medicine E
E. Radiation Therapy PR
F. Sonography E

APPENDIX R

RADIOGRAPHY STUDENT HEALTH RECORD

RADIOLOGIC SCIENCES STUDENT HEALTH RECORD

School of Health Sciences
Southern Illinois University Carbondale

Name

_____
Last First MI

Address

_____
Street City State Zip code

Date of Birth (DOB) _____Local/Cell Phone # _____

Name and address of person to contact in an emergency:

_____
Name of Emergency Contact Person Relationship to Student

Address

_____
Street City State Zipcode Phone Number

Name and address of family physician or healthcare provider:

_____
Name of Physician/Healthcare Provider

Address

_____
Street City State Zipcode Phone Number

PERSONAL HISTORY and PHYSICAL EXAMINATION: (completed by medical provider)

Check **only** if they apply to you. Explain details or abnormal results on the third page of this form.

- ☐ Allergy – Asthma
- ☐ Anxiety – Depression
- ☐ Back Injury
- ☐ Diabetes
- ☐ Fainting or Blackouts
- ☐ Heart Disease/Cardiac Pacemaker
- ☐ Hepatitis
- ☐ High Blood Pressure
- ☐ Hyperactivity
- ☐ Immunosuppressed
- ☐ Metallic Implant/Shrapnel
- ☐ Migraine Headaches
- ☐ Skeletal Deformity
- ☐ Other (Please describe) _____

Vaccinations for:

- ☐ Chicken Pox
- ☐ Measles
- ☐ Mumps
- ☐ Rubella
- ☐ Small Pox
- ☐ Tetanus
- ☐ Polio
- ☐ Rheumatic Fever
- ☐ Typhoid Fever
- ☐ Influenza
- ☐ Other (Please list) ……
  ……..

Prosthesis & Sensory Aides, such as:

- ☐ Glasses
- ☐ Ocular Implant
- ☐ Artificial Limb
- ☐ Insulin Pump
- ☐ Other (Please describe) ……..
  ……
- ☐ Contact Lenses
- ☐ Hearing Aid
- ☐ Cochlear Implant

Doctor, students entering the field of Radiologic Sciences must have the following abilities in order to complete the SIUC Radiologic Sciences Program. On the third page, please indicate and explain, in your opinion, which ability(ies) the student has difficulty performing.

a. Lift 50 pounds of weight and/or assist in lifting patients using proper body mechanics.
b. Push large pieces of equipment such as mobile radiographic units or mobile fluoroscopic units.
c. Push patients in wheelchairs or on stretchers.
d. See, hear, and respond quickly to patients in emergency situations.
e. Communicate with patients and other health care professionals in oral and written forms.
f. Understand requisitions and other records necessary for proper patient care.
g. See the patient and collimator lights to properly position for radiographs.
h. Move radiographic tubes, tables, upright Bucky trays, etc., as necessary for each exam.
i. Walk for long distances as is necessary for mobile (portable) radiography.
j. Performs all duties as required of a medical Radiographer.

REQUIRED IMMUNIZATIONS (completed by medical provider; based upon the CDC Recommended Adult Immunization Schedule, 2017. www.cdc.gov/vaccines/recs/schedules/downloads/adult/mmwr-adult-schedule.pdf. All dates must include month/day/year).

MMR (Measles, Mumps, Rubella): Two doses required, at least one month apart, after age 12 months **AND** after live vaccine available (05/01/1971).

Dose 1 ____/____/____ Dose 2 ____/____/____

If MMR was not given, list individual immunizations below, **OR** attach lab report of MMR titer.

Measles (Rubella, Hard Red, 10 Day Measles)
1. Two doses required, at least one month apart, after 12 months of age **AND** after live vaccine available (01/01/1968).
Dose 1 ____/____/____ Dose 2 ____/____/____

OR, 2. Date disease diagnosed and certified by physician. ____/____/____

OR, 3. Lab report of Measles titer proving immunity (attach lab report) ____/____/____

Rubella* (German Measles, 3 Day Measles)
1. One dose required, after 12 months of age **AND** after live vaccine available (06/19/1969). ____/____/____

OR, 2. Lab report of Rubella titer proving immunity (attach lab report) ____/____/____

* History of Rubella disease is not acceptable as proof of immunity.

Mumps
1. One dose required, after 12 months of age **AND** after live vaccine available (01/01/1968). ____/____/____

OR, 2. Date disease diagnosed and certified by physician. ____/____/____

OR, 3. Lab report of Mumps titer proving immunity (attach lab report) ____/____/____

Tetanus/Diphtheria: Three doses of Diphtheria/Pertussis/Tetanus (DPT) in childhood and a booster of Tetanus/Diphtheria within last 10 years **OR** a 1-time dose of Tetanus/Diphtheria/Acellular Pertussis (Tdap), within the last 2 years.

Dose 1 ____/____/____ Booster Dose ____/____/____ (must be within last 10 years) **OR**

Dose 2 ____/____/____ Tdap Dose ____/____/____ (must be given within last 2 years)

Tuberculosis: Two-Step Mantoux skin test/PPD skin test (Performed no earlier than June 1st).

Dose 1: ____/____/____ Dose 2: ____/____/____ Results of skin test _____ mm
Has patient had a history of previous positive skin test? ☐ Yes ☐ No
Has patient received BCG? ☐ Yes ☐ No Has patient received INH? ☐ Yes ☐ No

If "yes" is answered for any of the above 3 questions, attach supporting documentation, including the results of the student's QuantiFERON-TB Gold test (QFT) and Chest x-ray reports (where applicable).

Varicella** (Chicken Pox)
Date of Disease ____/____/____ **And** Varicella titer to prove immunity ____/____/____ (attach lab report)

Or, Dose 1 ____/____/____/ **And** Dose 2 ____/____/_____

**** History of Varicella disease is not acceptable as proof of immunity.**

Hepatitis B

Dose 1 ____/____/____ Dose 2 ____/____/____ Dose 3 ____/____/_____

Influenza (Flu Vaccine; Given in October or as soon as available) ____/____/____

STRONGLY RECOMMENDED IMMUNIZATIONS (completed by medical provider; based upon the CDC Healthcare Personal Vaccination Recommendations www.immunize.org/catg.d/p2017.pdf. All dates include month/day/year).

Meningitis ____/____/____ ☐ Menactra ☐ Menomune ☐ Meningococcal (unspecified)

Second Mumps Vaccine ____/____/____

List all prescriptions and non-prescription medications, injections or drugs currently in use.
List the purpose for the use of each medication. Please indicate how these medications will affect the student's behavior and ability to provide proper patient care.

Please use this space to comment or explain any abnormal result, and to indicate how this will affect patient care or professional behavior.

a. Is this student capable of performing all ***10 technical abilities*** listed on page 1? □ Yes □ No
b. If "No" then please explain which technical ability the student has difficulty performing.
c. How will this difficulty affect the student's ability to provide proper patient care?

_____ _____
Physician's Signature Office Phone Number

_____
Date

WAIVER:

I _____ acknowledge the accuracy of this
Student's Name
medical history and permit the release of this information to any of my assigned clinical supervisors. Additionally, for any medical test/treatment that I may receive at any of my assigned clinical sites, I permit the release of that information/related results to my Radiologic Sciences Program Clinical Coordinator or his/her designee.

_____ _____
Student's Signature Date

APPENDIX S

STUDENT EVALUATION of CLINICAL SITE

RADIOGRAPHY CLINICAL SITE EVALUATION

NAME OF HOSPITAL:

COURSE: RAD 222 **SEMESTER:**

This evaluation form enables the student to rate the clinical facility that she/he has been assigned to for the past semester. It in no way is reflected as a portion of the grading, and will be used only as an informative assessment for future student rotations. Please use a **dark blue** or **black ink** pen when completing this evaluation.

1. The Clinical instructor serves to evaluate Competency testing as well as Image and Behavioral Evaluations. In your opinion were these evaluations:

   ☐ Completely objective [fair; equitable], regardless of whether my performance was to the best of my ability or not.

   ☐ Somewhat subjective in overestimating my capabilities.

   ☐ Somewhat subjective in underestimating my capabilities.

   ☐ Completely subjective in that my performances were generally always better than what my evaluations recorded.

2. The Radiologist ultimately directs how a department functions through interaction with the technologists. From the student perspective, did the Radiologist function:

   ☐ Well with the technologists and included you as part of the team.

   ☐ Well with the technologists, but was reserved and stayed aloof from student interaction.

   ☐ Generally part from the department activities except to perform some exams.

3. The protection procedures practiced by the technologists regarding collimation, shielding, etc., in this institution were:

   ☐ The best possible radiation protection procedures, reinforcing practices I have learned didactically (in class/lab).

   ☐ Good protection procedures used most of the time.

   ☐ Either not reinforcing or practices differing from what I learned (Please describe what was different and/or not reinforced).

4. Positioning skills exemplified at this institution were:

   ☐ Highly accurate, and concurrent with procedures learned in class.

   ☐ Usually accurate, some variations from positioning skills learned in class.

   ☐ Seldom accurate, many repeat exposures; not concurrent with procedures I learned didactically (in class & lab).

5. Radiographic exposure factors (imaging techniques) used at this facility were:

- ☐ Highly accurate and consistent in each room.
- ☐ Usually accurate; some variation between rooms.
- ☐ Seldom accurate; technologists used own techniques based upon personal experience.

6. Radiographic exposure factors (imaging techniques) used at this facility were:

- ☐ Computer based (using DR and/or DDR). The technologists changed image quality based upon personal experience, and easily explained what they did, and why.
- ☐ Computer based (using DR and/or DDR). The technologists changed image quality based upon personal experience. They could not explain why they changed image quality beyond stating what the equipment manufacturer preprogrammed into the control panel.
- ☐ Computer based (using DR and/or DDR). The technologists used the exposure factors preprogrammed into the control panel by the manufacturer without regard for the factors that control radiographic image quality or patient pathology stated on the imaging request.

7. Working in the health field demands a rapport with patients demonstrating cordial, empathetic treatment of the patient. The technologists here were:

- ☐ Very aware of patient feelings and dealt with them empathetically.
- ☐ Occasionally short with the patient, but generally attuned to patient needs.
- ☐ Very abrupt and distant to patient needs.
- ☐ Occasionally too anxious to leave the patient alone and not deal with their needs.

HOSPITAL NAME: _____ Semester: _____

8. ***Direct supervision*** assures patient safety and proper educational practices. The JRCERT defines ***Direct Supervision*** as student supervision by a qualified radiographer who reviews the request for the radiographic examination: (a) to determine the **capability of the student** to perform the examination with reasonable success; or (b) to determine if the **condition of the patient** contraindicates performance of the examination by the student. Students must have adequate and proper supervision during all clinical assignments, which includes **direct supervision until competency is achieved.** The Clinical Instructor or a qualified radiographer at this hospital:

   ☐ was in the Imaging room each time I performed an Imaging exam for Competency, and closely monitored my performance and evaluated my images.

   ☐ was in the next Imaging room each time I performed an Imaging exam for Competency, and only came into my room to tell me that my exam was finished.

   ☐ was in the next Imaging room each time I performed an Imaging exam, and only came into my room to tell me that specific images needed to be repeated.

   ☐ was seldom in the same vicinity each time I performed an Imaging exam for Competency, and I had to look for him/her to sign my Competency form.

9. ***Indirect Supervision*** promotes patient safety and proper educational practices. The JRCERT defines ***Indirect Supervision*** as that supervision provided by a qualified radiographer ***immediately available*** to assist students regardless of the level of student achievement. Where ***immediately available*** means the physical presence of a qualified radiographer in an adjacent imaging room or location. The Clinical Instructor or a qualified radiographer at this hospital:

   ☐ was in the next Imaging room each time I performed an Imaging exam, and was available and willing to help me as needed.

   ☐ was in the next Imaging room each time I performed an Imaging exam, and only came into my room to tell me that my exam was finished.

   ☐ was in the next Imaging room each time I performed an Imaging exam, and only came into my room to tell me that specific images needed to be repeated.

   ☐ was seldom in the same vicinity each time I performed an Imaging exam, and I had to look for him/her to help me with a patient.

HOSPITAL NAME: _____ Semester: _____

10. To assure patient safety and proper education, the student will be under **direct supervision when making a repeat radiographic image** during **100%** of clinical training. The qualified radiographer must be physically present in the Imaging room during the performance of the repeated image, and must approve the student's positioning prior to re-exposing the patient. The Clinical Instructor or a qualified radiographer at this hospital:

    ☐ was in the Imaging room each time I performed a repeated Image, and closely monitored my performance.

    ☐ told me what image needed to be repeated, but stayed in the next Imaging room while I performed the repeated image.

    ☐ was seldom in the same vicinity each time I performed a repeated image and I had to look for him/her to approve my repeated image.

11. In summary, what are your feelings/thoughts about your clinical education at this site:

    ☐ Excellent, opportunity to experience multiple procedures, exceptional situations, generally reflective that I am part of the department.

    ☐ Very good, I worked well with the department and was allowed to work within the goals of my designated objectives.

    ☐ Good, I was somewhat restricted to only my designated clinical objectives.

    ☐ Not good, the objectives for the semester were not considered in my schedule and department experiences.

    ☐ Other. Please describe your feelings/thought/experiences on page 182, item #18, or on a separate page, and then attach it to this Evaluation.

12. What experiences have been the most meaningful to you as a radiography student?

HOSPITAL NAME: _____ Semester: _____

Please feel free to respond to items 13-18 on a separate page/pages, and then attach the extra page(s) to this Evaluation).

13. During this clinical semester, what experiences have been less than positive (least meaningful; disappointing; distressful) for you as a radiography student?

14. During this clinical semester, what are some examples or some incidents when you felt or thought you really understood what radiography was all about?

15. List at least 2 expectations or questions that you had, before your clinical semester started, that you didn't get answers to. Feel free to list more expectations or questions on a separate page, and attach it to this Evaluation.

16. Now that your 1st Radiography clinical semester is over, what are your expectations for your next clinical semester in RAD 332 Radiography Clinic 2?

HOSPITAL NAME: _____ Semester: _____

17. What would you like to know more about, before your 2nd Radiography clinical semester starts?

18. Please make any additional comments relative to any portion of this clinical rotation (use an extra sheet of paper if necessary).

RADIOGRAPHY CLINIC 2 SITE EVALUATION

NAME OF HOSPITAL:

COURSE: RAD 332 **SEMESTER:**

This evaluation form enables the student to rate the clinical facility that she/he has been assigned to for the past semester. The information a student provides on this form has no effect on his/her clinical grade. It is used only as an informative assessment for future student rotations. Please use a **dark blue ink** pen or **black ink** pen when completing this evaluation.

1. The Clinical Instructor (and/or his/her designee) serves to evaluate Exam Competency testing as well as monthly Behavioral Evaluations. In your opinion were these evaluations:

   ☐ Completely objective [fair; equitable] regardless of whether my performance was to the best of my ability or not.

   ☐ Somewhat subjective in overestimating my capabilities.

   ☐ Somewhat subjective in underestimating my capabilities.

   ☐ Completely subjective in that my performances were generally always better than what my evaluations recorded.

2. The Radiologist ultimately directs how a department functions through interaction with the technologists. From the student perspective, did the Radiologist function:

   ☐ Well with the technologists and included you as part of the team.

   ☐ Well with the technologists, but was reserved and stayed aloof from student interaction.

   ☐ Generally apart from the department activities except to perform some exams.

3. The protection procedures practiced by the technologists regarding collimation, shielding, holding patients, marker placement, etc., in this radiology department were:

   ☐ The best possible radiation protection procedures, reinforcing practices I have learned didactically (in class & lab).

   ☐ Good protection procedures used most of the time.

   ☐ Either not reinforcing or practices differing from what I learned. (Please describe what was different and/or not reinforced).

4. Positioning skills exemplified (demonstrated) in this radiology department were:

   ☐ Highly accurate, and concurrent with procedures learned in class.

   ☐ Usually accurate, some variations from positioning skills learned in class.

   ☐ Seldom accurate, many repeat exposures; not concurrent with procedures I learned didactically (in class & lab).

5. All radiographic exposure factors (techniques; manual and phototimed/AEC) used at this facility were:

   ☐ Highly accurate and consistent in each room.

   ☐ Usually accurate; some variation between rooms.

   ☐ Seldom accurate; technologists used own techniques based upon personal experience.

6. Radiographic exposure factors (techniques) used at this facility were:

   ☐ Computer based (using DR and/or DDR). The technologists changed image quality based upon personal experience, and easily explained what they did, and why.

   ☐ Computer based (using DR and/or DDR). The technologists changed image quality based upon personal experience. They could not explain why they changed image quality beyond stating what the equipment manufacturer preprogrammed into the control panel.

   ☐ Computer based (using DR and/or DDR). The technologists used the exposure factors preprogrammed into the control panel by the manufacturer without regard for the factors that affect (control) radiographic image quality.

7. Working in the health field demands a rapport with patients demonstrating cordial, empathetic treatment of the patient. The technologists at this hospital were:

   ☐ Very aware of patient feelings and dealt with them empathetically.

   ☐ Occasionally short with the patient, but generally attuned to patient needs.

   ☐ Very abrupt and indifferent to patient needs.

   ☐ Occasionally too anxious to leave the patient alone and not deal with his/her needs.

HOSPITAL NAME: _____ SEMESTER: _____

8. ***Direct supervision*** assures patient safety and proper educational practices. The JRCERT defines ***Direct Supervision*** as student supervision by a qualified radiographer who reviews the request for the radiographic examination: (a) to determine the **capability of the student** to perform the examination with reasonable success; or (b) to determine if the **condition of the patient** contraindicates performance of the examination by the student. Students must have adequate and proper supervision during all clinical assignments, which includes **direct supervision until competency is achieved.** The Clinical Instructor or a qualified radiographer at this hospital:

   - ☐ was in the Imaging room each time I performed an Imaging exam for Competency, and closely monitored my performance and evaluated my images.
   - ☐ was in the next Imaging room each time I performed an Imaging exam for Competency, and only came into my room to tell me that my exam was finished.
   - ☐ was in the next Imaging room each time I performed an Imaging exam, and only came into my room to tell me that specific images needed to be repeated.
   - ☐ was seldom in the same vicinity each time I performed an Imaging exam for Competency, and I had to look for him/her to sign my Competency form.

9. ***Indirect Supervision*** promotes patient safety and proper educational practices. The JRCERT defines ***Indirect Supervision*** as that supervision provided by a qualified radiographer ***immediately available*** to assist students regardless of the level of student achievement. Where ***immediately available*** means the physical presence of a qualified radiographer in an adjacent imaging room or location. The Clinical Instructor or a qualified radiographer at this hospital:

   - ☐ was in the next Imaging room each time I performed an Imaging exam, and was available and willing to help me as needed.
   - ☐ was in the next Imaging room each time I performed an Imaging exam, and only came into my room to tell me that my exam was finished.
   - ☐ was in the next Imaging room each time I performed an Imaging exam, and only came into my room to tell me that specific images needed to be repeated.
   - ☐ was seldom in the same vicinity each time I performed an Imaging exam, and I had to look for him/her to help me with a patient.

HOSPITAL NAME: _____ SEMESTER: _____

10. To assure patient safety and proper education, the student will be under **direct supervision when making a repeat radiographic image** during **100%** of clinical training. The qualified radiographer must be physically present in the Imaging room during the performance of the repeated image, and must approve the student's positioning prior to re-exposing the patient. The Clinical Instructor or a qualified radiographer at this hospital:

    ☐ was in the Imaging room each time I performed a repeated Image, and closely monitored my performance.

    ☐ told me what image needed to be repeated, but stayed in the next Imaging room while I performed the repeated image.

    ☐ was seldom in the same vicinity each time I performed a repeated image and I had to look for him/her to approve my repeated image.

11. In summary, what are your feelings/thoughts about your clinical education at this site:

    ☐ Excellent, opportunity to experience multiple procedures, exceptional situations, generally reflective that I am part of the department.

    ☐ Very good, I worked well with the department and was allowed to work within the goals of my designated objectives.

    ☐ Good, I was somewhat restricted to only my designated clinical objectives.

    ☐ Not good, the objectives for the semester were not considered in my schedule and department experiences.

    ☐ Other; Please describe your feelings/thought/experiences on a separate page and then attach it to this Evaluation.

Please feel free to respond to items 12-18 on a separate page/pages, and then attach the extra page(s) to this Evaluation).

12. What experiences have been the most meaningful to you as a radiography student?

HOSPITAL NAME: _____ SEMESTER: _____

13. What experiences have been less than positive (least meaningful; disappointing; distressful) for you as a radiography student?

14. What are some examples or some incidents when you felt/thought you really understood what radiography was all about?

15. List at least 2 expectations or questions that you had, before your clinical semester started, that you didn't get answers to. Feel free to list more expectations or questions on a separate page, and attach it to this Evaluation.

16. Now that your 2nd clinical semester is over, what are your expectations for your next clinical semester in your desired Advanced Modality?

HOSPITAL NAME: _____ **SEMESTER:** _____

17. What would you like to know more about, before your Advanced Modality clinical semesters start?

18. Please make any additional comments relative to any portion of this clinical rotation (use an extra sheet of paper if necessary).