Thomas Jefferson University

College of Health Professions

Department of Medical Imaging & Radiation Sciences

Academic Policies and Clinical Education Student Handbook

Computed Tomography

2024-2025

Equal Opportunity

Thomas Jefferson University is committed to providing equal educational and employment opportunities for all persons without regard to race, color, national or ethnic origin, marital status, religion, sex, sexual orientation, gender identity, age, disability, veteran's status or any other protected characteristic. The consideration of factors unrelated to a person's ability, qualifications and performance is inconsistent with this policy. Any person having inquiries or complaints concerning Thomas Jefferson University's compliance with Title VI, Title IX, the Age of Discrimination Act of 1975, the Americans with Disabilities Act, or Section 504 of the Rehabilitation Act is directed to contact their Student Affairs Dean, the Title IX Coordinator, or Human Resources—Employee Relations, who have been designated by Thomas Jefferson University to coordinate the institution's efforts to comply with these laws. Any person may also contact the Assistant Secretary for Civil Rights, U.S. Department of Education, Washington, D.C. 20202, or the Director, U.S. Department of Education, Office for Civil Rights, Region Three, Philadelphia, Pennsylvania, regarding the University's compliance with the equal opportunity laws.

Required Background Check

Students who are offered admission to Jefferson in a health-related program are generally required to pass a criminal background check and child abuse clearance. Please consult with the Program Director of the Office of Admissions for clarification on the required paperwork for admission. Additionally, some departments and/or programs within the College, as well as some clinical sites may require students to be fingerprinted and/or drug tested. The Office of Admissions, along with your academic program, will provide you with the appropriate information to complete these requirements.

Clinical rotation, fieldwork, and residency sites that require a criminal background check, child abuse clearance and/or fingerprinting may deny a student's participation in the clinical experience, rotation, fieldwork, or residency because of a felony or misdemeanor conviction or a record of child abuse. Clinical sites may also deny participation in clinical experiences for other reasons, including but not limited to failure of a required drug test, or inability to produce an appropriate health clearance. As participation in clinical experiences, rotations, fieldwork, or residencies is a required part of the curriculum and a requirement for graduation, denial of participation by a clinical site may result in delay of graduation or the inability to graduate from the program.

Regardless of whether a student graduates from Jefferson, individuals who have been convicted of a felony or misdemeanor may be denied certification or licensure as a health professional. Information regarding individual eligibility may be obtained from the appropriate credentialing bodies.

Disclaimer Statement

The Department of Medical Imagining and Radiation Sciences reserves the right to amend, modify, rescind, or implement any policies, procedures, regulations, fees, conditions and courses described herein as circumstances may require without prior notice to persons who might thereby be affected. The provisions of this handbook are not and may not be regarded as contractual between or among the College, its students or its employees or agents.

Diversity Statement

Jefferson holds itself accountable, at every level of the organization, to nurture an environment of inclusion and respect, by valuing the uniqueness of every individual, celebrating and reflecting the rich diversity of its communities, and taking meaningful action to cultivate an environment of fairness, belonging, and opportunity.

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Mission

We Improve Lives.

Thomas Jefferson University is a national leader in professional education, preparing students for the future of work, while also engaging in groundbreaking research and creative discovery. Dedicated to inclusive and experiential learning, Jefferson fosters transdisciplinary collaboration, embraces social responsibility, and celebrates the value of diverse identities and perspectives.

Vision

Reimagining health, education and discovery to create unparalleled value.

Values

Put People First
Be Bold and Think Differently
Do the Right Thing

Commitment to Diversity, Equity & Inclusion

Jefferson holds itself accountable, at every level of the organization, to nurture an environment of inclusion and respect, by valuing the uniqueness of every individual, celebrating and reflecting the rich diversity of its communities, and taking meaningful action to cultivate an environment of fairness, belonging & opportunity.

MISSION OF THE DEPARTMENT &COMPUTED TOMOGRAPHY PROGRAM

The mission of the Department of Medical Imaging & Radiation Sciences and the Computed Tomography Program is to provide a comprehensive education preparing students for entry-level practice in medical imaging and radiation sciences as competent, caring members of the health care team, cultivating professionalism and lifelong learning.

PROGRAM GOALS AND STUDENT LEARNING OUTCOMES

Goal #1: Clinical Competence:

CT Program students will be clinically competent

Student Learning Outcomes:

1-A. CT Program students will demonstrate appropriate patient care techniques.

1-B. CT Program students will demonstrate appropriate equipment skills and techniques.

Goal #2: Critical Thinking:

CT Program students will apply critical thinking and problem solving skills in making decisions about CT exams.

Student Learning Outcomes:

2-A. CT Program students will demonstrate appropriate image evaluation techniques

2-B. CT Program students will demonstrate appropriate optimization techniques

Goal #3: Comunication Skills

CT Program students will master the communication skills necessary to interact successfully with patients and other members of the healthcare team..

Student Learning Outcomes:

3-A. CT Program students will demonstrate appropriate oral communication techniques..

3-B. CT Program students will demonstrate appropriate written communication techniques

Goal #4: Professional Development and Growth

CT Program students will demonstrate potential for professional development and growth.

Student Learning Outcomes:

4-A. CT Program students will develop effective work habits and professional values

4-B. CT Program students will function as professionals in the healthcare setting.

THE HANDBOOK

The Academic Policies and Clinical Education Student Handbook serves to share with you certain resources, policies, and procedures that may be useful to you during your undergraduate studies in the Department of Medical Imaging and Radiation Sciences in the Jefferson College of Health Professions. While we have attempted to provide you with a comprehensive handbook, it does not stand alone. Students are responsible for understanding academic policies and procedures of Thomas Jefferson University and the Jefferson College of Health Professions (JCHP). Important university wide policies, including the Community Standards and Student Sexual Misconduct Policy, and information on University Services are found on the Thomas Jefferson University Center Student Handbook website at www.jefferson.edu/handbook. Students are also directed to the policies and procedures contained in the JCHP Student Handbook, which can be found at https://www.jefferson.edu/academics/colleges-schools-institutes/health-professions/student-resources.html

If you should have any questions throughout your academic career, we encourage you to reach out to your program director, advisor, or department chair.

DISCLAIMER STATEMENT

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NATIONAL CERTIFICATION EXAMINATION

Graduates of the one-year and two-year Bachelor of Science degree programs are eligible to take the associated certification examinations upon completion of the Bachelor of Science degree program and award of the Bachelor of Science degree. Students are eligible to take the associated certification examinations of the American Registry of Radiologic Technologists (ARRT), American Registry of Diagnostic Medical Sonographers (ARDMS), Cardiovascular Credentialing International (CCI), and the Medical Dosimetrist Certification Board (MDCB), as applicable. Students who pass these examinations receive national certification.

PROGRAM ACCREDITATION

The educational programs of the department are approved by the University administration. Programs are programmatically accredited by their respective accreditation bodies (e.g. JRCERT, JRCNMT, and CAAHEP). All programs, including Computed Tomography and Invasive Cardiovascular Technology, are covered under the University's accreditation by Middle States Commission on Higher Education.

PROGRAM COMPLIANCE

A student who believes a program is not in compliance with the accreditation standards should submit a written complaint to the Program Director, including documentation for the complaint. The Department Chair, Program Director, and Clinical Coordinator will review the complaint and documentation and respond to the student within three (3) business days of receiving the complaint. If the student is not satisfied with the response, the student has the right to contact the accreditation body [1].

[1] *Students in the CT or ICVT Program should contact the Dean of JCHP.*

ACADEMIC POLICIES

POLICIES ON STUDENT PROGRESSION

COURSE REQUIREMENTS

1. Program curriculum is sequential in nature and each course must be taken in the prescribed semester according to the plan of study.
2. Students are responsible for accessing courses through Canvas, https://canvas.jefferson.edu/ and downloading all course syllabi, handouts, and assignments for each course every semester.
3. Students must complete course evaluations for each of their courses at the end of the semester. A link will be provided to the students at the end of each semester.
4. Students must complete the University Orientation, Health Insurance Portability and Accountability Act (HIPPA) module, and Safety module prior to matriculation.
5. Students are responsible for checking their Jefferson e-mail accounts daily. All program related correspondence will occur through this account daily.

POLICIES ON UNDERGRADUATE STUDENT PROGRESSION IN THE MEDICAL IMAGING & RADIATION SCIENCES MAJOR

1. Students who earn one course grade of C- or below in the Medical Imaging & Radiation Sciences curriculum in any academic year will be placed on departmental academic probation and will be required to meet with their assigned faculty advisor to monitor academic progress.
2. Students who do not maintain a minimum of a 2.0 cumulative GPA will be placed on university academic probation.
3. Students who earn two or more course grades of C- or below in the Medical Imaging & Radiation Sciences curriculum in any academic year will be dismissed from the Department of Medical Imaging & Radiation Sciences.
4. Students who earn a course grade of F in any Medical Imaging & Radiation Sciences curriculum will be dismissed from the Department of Medical Imaging & Radiation Sciences.
5. Incomplete grades for a Medical Imaging & Radiation Sciences course can be assigned only in the case of extenuating circumstances. These circumstances must be reviewed by the faculty prior to the issuance of an “Incomplete” grade. In all cases, an “Incomplete” grade is assigned only when the work already done has been of a quality acceptable to the instructor.

PROBATION/RETURNING TO GOOD ACADEMIC STANDING

Students who achieve the minimum standards to return to good academic standing (2.0 cumulative GPA, no additional course grades of C-, D, or F in the academic year) will be removed from probation at the end of the academic year. Two-year students who have been placed on departmental academic probation during their junior academic year, but have successfully completed their junior academic year, will be taken off departmental academic probation at the beginning of their senior academic year.

At the end of the probationary period:

1. The student achieves: the minimum 2.0 cumulative GPA, no additional course grades of C-, D, or F in the academic year is reinstated in good standing, or

2. The student fails to achieve: the minimum 2.0 cumulative GPA, no additional course grades of C, D, or F in the academic year at the end of the probationary period and is dismissed from the College for academic underachievement.

ACADEMIC INTEGRITY POLICY

Academic Integrity is the foundation of all Jefferson teaching, learning, and professional endeavors and is vital to advancing a culture of fairness, trust and respect. All members of the University community must maintain respect for the intellectual efforts of others and be honest in their own work, words, and ideas. The University Academic Integrity Policy can be found https://www.jefferson.edu/life-at-jefferson/handbooks/policies/graduate-policies/academic-integrity.html.

GRADUATION REQUIREMENTS

Requirements for graduation include:

- Completion of a graduation application
- Completion of all clinical and didactic courses in the program's curricular plan of study
- Receiving a passing grade for all clinical and didactic courses in the program's curricular plan of study
- Being in good academic standing at the end of the final semester of the program

TIME TO DEGREE RESTRICTIONS

Students are required to complete their course of study in no more than 150% of the standard time frame required by the academic program.

- The one-year Bachelor of Science program has a standard time frame of 12 months.
- The two-year Bachelor of Science program has a standard time frame of 24 months.
- The undergraduate certificate program has a standard time frame of 12 months.

An extension may be granted in the event of extenuating circumstances. The death of a family member or documented medical illness are examples of unusual and extenuating circumstances.

TRANSFER OF CREDITS/CHALLENGE EXAM, CREDIT BY EXAM, COURSE BY APPOINTMENT

Prerequisites must be completed by the time the student enters Thomas Jefferson University. Credits may be earned through standardized tests, including CLEP for non-science-based courses. Thomas Jefferson University does not accept challenge exams.

COURSE REPEAT POLICY

Programs in the Department follow a sequential prescribed curricular plan of study. Courses are only offered one time in a particular semester. If a course is failed with a grade of "F', the student is dismissed from the Department. The Department readmission policy should be followed if a student wishes to seek readmission. An individual plan of study would be created, that includes, but not limited to repeating of the full program's curricular sequence.

READMISSION AFTER DISMISSAL

Matriculated students who have been dismissed from the Department of Medical Imaging & Radiation Sciences may petition, in writing, for readmission within 1 year of dismissal directly to the Department Chair. Students interested in applying for readmission should contact the Department Chair for program-specific readmissions procedures.

Students who have not been enrolled within JCHP for greater than a 1-year period of time must re-apply for admission through the Office of Admissions.

Please note: All readmitted students are subject to the academic and curricular requirements in place at the time of readmission. Additionally, start terms for the readmitted students will be determined by the program and based on the student's plan of study; readmitted students cannot assume that they will start in the next immediate term after readmission has been granted.

The student's Department Chair will indicate any requirements that the student must meet upon readmission. The student will be held responsible for fulfilling these special criteria of academic performance established with the program upon readmission, in addition to the overall program and College requirements for achieving good academic standing.

RETENTION OF STUDENT WORK

Student records are maintained by the Department for a minimum period of three years after graduation.

CONTINUOUS ENROLLMENT

The Department of Medical Imaging & Radiation Sciences curriculum was designed to be delivered sequentially, where concepts and skills are introduced, expanded upon, and mastered across the program and where competencies are enhanced at different points across the curriculum. To be most effective at delivering the requisite competencies in accordance with accreditation standards, students must be continuously enrolled from the point of matriculation until graduation unless a leave of absence is approved. If a personal or medical leave of absence is required, the leave must be approved and must not exceed one calendar year.

ACCOMMODATIONS – GENERAL

Thomas Jefferson University is committed to providing equal education opportunities to all students, including students with disabilities, in accordance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Thomas Jefferson University will provide reasonable accommodations to all qualified individuals with disabilities to allow equal access and full participation to all University sponsored activities and programs. More information on disability accommodations can be found at https://www.jefferson.edu/university/academic-affairs/schools/student-affairs/disability-accommodations/Overview.html.

To request an accommodation, please contact the Office of Student Affairs & Career Counseling (jefferson.edu)

TECHNICAL STANDARDS - ACCOMMODATIONS

If a student cannot demonstrate the skills and abilities listed in the technical standards for the program, it is the responsibility of the student to request an appropriate accommodation. The University will provide reasonable accommodations provided that such accommodations do not fundamentally alter the nature of the program and/or do not impose an undue hardship such as those that cause significant expense, difficulty or are unduly disruptive to the educational process.

TECHNICAL STANDARDS

A Computed Tomography (CT) Technologist is typically employed in a hospital or a clinic to provide direct care for patients and must be able to apply verified knowledge and skillfully perform CT procedures. Clinical and laboratory assignments for the CT program require certain physical demands that are the technical standards of admission. These standards are based upon the minimum tasks performed by graduates of the program as recommended by the American Society of Radiologic Technologists. Listed below are the technical standards which all applicants must meet in order to participate and complete the CT program.

1. Sufficient visual acuity to accurately administer contrast agents and to monitor imaging equipment as well as provide the necessary patient assessment and care.
2. Sufficient auditory perception to receive verbal communication from patients and members of the healthcare team and to assess the health needs of people through the use of monitoring devices such as intercom systems, blood pressure gauges and fire alarms.
3. Sufficient gross and fine motor coordination to respond promptly and to implement skills related to the performance of CT, such as positioning, transporting and imaging patients. CT technologists must be able to manipulate equipment such as the scan console and power injectors. In addition, CT technologists must perform venipuncture on a regular basis.
4. Sufficient communication skills (verbal, reading, writing) to interact with individuals and to communicate their needs promptly and effectively, as may be necessary in the patient's/client's interest.
5. Sufficient intellectual and emotional function to plan and implement patient care.

Examples of specific technical standards that the CT student must be able to meet are:

Lift, transfer and/or move patients from wheelchair/stretcher to scan table, including trauma patients.
- Physical agility: sitting (4-7 hours)
- Physical and mental abilities to handle moderate and frequent exposure to infectious agents (blood, urine, etc.)
- Manual dexterity and ability to bend/stretch
- Distinguish colors and shades of gray
- Demonstrate effective interpersonal skills, including patient instruction
- Read and extract information from the medical chart or patient requisitions
- Explain the clinical study verbally and/or in writing

IMPLICATIONS OF PROBATION-CREDENTIALING

Many accrediting and credentialing bodies require notification that a student was placed on probation. By requesting that the Program complete the appropriate paperwork, a student affirmatively consents to release of such information. This means that if accrediting or credentialing bodies require verification from the University, instances of professionalism probations and academic probations will be reported. This may or may not affect a student's job placement or ability to gain credentialing for a particular institution.

STUDENT GRIEVEANCE

All members of the Thomas Jefferson University Community have the right to express concerns when they perceive that they have been treated in a manner not consistent with the standards of conduct at the University. The student grievance procedure is intended to allow students this mode of expression. For academic grievances within the program, students should refer to the Student Grievance Procedure outlined in the JCHP Student Handbook. For grievances external to the academic program, students should consult the Grievance Procedure outlined in the Rights and Responsibilities section of the TJU Student Handbook.

STUDENT ADVISEMENT

All students are required to meet with their faculty advisor at least once during each semester.

COMPETENCY-BASED CLINICAL EDUCATION

COMPETENCY BASED CLINICAL EDUCATION

Competency-based clinical education has been established for the students enrolled in the Department of Medical Imaging & Radiation Sciences programs. It is designed to permit accurate assessment of the knowledge, skills, and attitudes of students in the clinical education component of the program. Evaluation of students' clinical competencies must be completed by registered technologists under the direction of the Clinical Affiliate Supervisor.

All students must attend the scheduled clinical education rotations (see clinical syllabus). All students must complete the minimum number of clinical competencies in accordance with the requirement of their certification and/or accreditation body. Individual clinical course syllabi will detail the clinical competency requirements to successfully pass the clinical course.

CLINICAL EDUCATION ELIGIBILITY

To be assigned to a Clinical Affiliate, the student must meet the following requirements or obligations:

- Provide and maintain proof of certification in adult, child, and infant cardiopulmonary resuscitation (BLS/CPR/AED for Healthcare Provider).
- Meet program specific technical standards.
- Complete all immunization requirements prior to commencing or resuming clinical courses.
- Be in compliance with the University requirements for influenza vaccination.
- Complete any additional requirements mandated by the clinical site, department, or university as indicated at the time of the clinical course.

Failure to meet the clinical education eligibility requirements will result in the delay of clinical or the failure of clinical courses. Students not in compliance with the eligibility requirements are not permitted to attend clinical and possibly in-person classes.

CLINICAL PRACTICES AND POLICIES

1. Attendance at clinical is mandatory.
2. A student who does not demonstrate safe clinical practice will be in violation of clinical practices and policies.
3. A student who does not demonstrate professional behavior and professional practice may be removed from their clinical rotation and clinical site.
4. Safe clinical or professional practice is defined as:
    a. Adhering to the *Patients' Bill of Rights* – **Appendix A.**
    b. Performing clinical duties consistent with the professional standards of ethics – **Appendix B.**
    c. Adhering to the code of behavior/conduct outlined in the University, College and Department of Medical Imaging & Radiation Sciences handbooks.
    d. Adhering to all clinical practices and policies of the clinical site, and as outlined in the University, College, and Department policies and procedures.
    e. Adhering to departmental radiation protection and monitoring practices where appropriate. See Appendix C, D, E, F, G, H, I, J, K (only applicable to modalities that use ionizing radiation).
    f. Adhering to the Radiographer's scope and practice standards, **appendix L.**

VIOLATIONS OF CLINICAL PRACTICES AND POLICIES

Violations of Clinical Practices and Policies will typically be addressed through progressive discipline, as follows:

- First violation – written warning and counseling by the Program Director and/or Clinical Coordinator.
- Second violation – possible suspension, at the discretion of the Program Director, or dismissal.
- Third violation – dismissal from the Department.

Depending on particular circumstances, one or more progressive disciplinary steps may be skipped in instances of particularly serious violations of policies and/or practices, and some egregious violations may result in immediate dismissal from the Department.

POLICY GOVERNING CLINICAL EDUCATION SCHEDULING

The purpose of the clinical assignment is to correlate didactic knowledge with practical skills and attitudes. The total number of students assigned to any clinical site shall be determined by the Department of Medical Imaging & Radiation Sciences and approved by program accreditation bodies.

The student is subject to all rules and regulations of the clinical affiliate. The clinical affiliate reserves the right to suspend or terminate from the site a student who does not adhere to established policies of the program or the clinical affiliate. A student who does not maintain appropriate behavior may be suspended or dismissed immediately. (Refer to the section entitled "Responsibilities of the Student")

Due to the limited number of clinical sites, should a student be asked to leave the assigned clinical site for any disciplinary reason, the Department cannot guarantee the student a new clinical placement. This would result in a failure for the clinical course and dismissal from the Department.

If a student is suspended or dismissed from a clinical affiliate, the Department Chair, Program Director and Clinical Coordinator will review the circumstances for this action. All parties are encouraged to address the issue promptly in writing (within (5) business days whenever possible) so that resolution of grievance should require no more than three (3) weeks. If the decision to dismiss is upheld, the clinical dismissal will result in a final grade of "F". Students who have reason to believe that the grade has been inappropriately assigned may request a review of the grade in accordance with the provisions of the Grade Appeal Protocol, which is published in the TJU Student Handbook.

CLINICAL AFFILIATE ASSIGNMENT

The Program Director and/or Clinical Coordinator determines student schedules and assignments at clinical affiliates. Assignments at the clinical affiliates are intended to provide the student with a comprehensive clinical education, as deemed appropriate by the faculty and serve to correlate didactic knowledge with practical skills. Students are not guaranteed specific clinical affiliates; however, student input is considered.

Please see **Appendix M** for the policy regarding students in clinical mammography rotations or other imaging procedures performed by professionals who are of the opposite gender of the patient.

Students will have the opportunity to select multiple imaging modalities to observe beginning in the first semester of the program. Students may visit or revisit any modality of their choice during the program.

The program provides equitable learning opportunities for all students regarding learning activities and clinical assignments. Any student requesting changes in the clinical schedule must submit written justification for the changes to the Program Director and/or Clinical Coordinator. A decision will be made based on the student's educational needs and site availability.

RESPONSIBILITIES OF THE CLINICAL AFFILIATE SUPERVISOR/PRECEPTORS

The clinical affiliate supervisors/preceptors are available to students whenever they are assigned to a clinical setting. Responsibilities include:

- Providing appropriate clinical supervision. Refer to the section entitled "Supervision Policy"
- Providing student clinical evaluation and feedback.
- Providing orientation to the clinical department.
- Providing feedback to the program director and clinical coordinator.
- Being knowledgeable of program goals.
- Understanding the clinical objectives and clinical evaluation system.
- Understanding the sequencing of didactic instruction and clinical education.
- Providing students with clinical instruction and supervision.
- Evaluating students' clinical competence.
- Maintaining competency in the professional discipline and instructional and evaluative techniques through continuing professional development.
- Maintaining current knowledge of program policies, procedures, and student progress.
- Maintaining safety and confidentiality of student records, instructional materials, and other program materials.

RESPONSIBILITIES OF CLINICAL STAFF

Responsibilities of the clinical staff include:

- Understanding the clinical competency system.
- Understanding requirements for student supervision.
- Supporting the educational process.
- Maintaining current knowledge of program policies, procedures, and student progress.
- Maintaining safety and confidentiality of student records, instructional materials, and other program materials.

RESPONSIBILITIES OF THE DEPARTMENT/CLINICAL COORDINATOR

The Department of Medical Imaging & Radiation Sciences Clinical Coordinator coordinates the daily operations of clinical education. Duties include, but are not limited to:

- Providing clinical education placements.
- Mentoring students.
- Supervising students.
- Advising students.
- Providing guidance to clinical instructors.
- Reviewing program policies and procedures with clinical affiliate supervisor/instructors.
- Visiting clinical sites each semester to observe and evaluate student performance.
- Maintaining safety and confidentiality of student records, instructional materials, and other program materials.

RESPONSIBILITIES OF THE STUDENT

The student is responsible for:

- Displaying professional appearance in compliance with the dress code policy.
- Establishing harmonious working relationships and earning the respect of the Medical Imaging & Radiation Sciences personnel and other members of the health care team through a professional and dignified posture and attitude.
- Using all equipment and materials responsibly and safely.
- Embodying the highest standards of civility, honesty, and integrity.
- Respecting and protecting the privacy, dignity, and individuality of others.
- Observing and assisting the clinical staff.
- Attending and participating in all scheduled clinical activities.
- Consulting with clinical affiliate supervisors and/or departmental faculty for help with problems.
- Participating in the development of an individualized clinical education plan.
- Maintaining an accurate record of clinical examinations/competencies.
- Recording the number and types of evaluations required during each academic semester.
- Striving to broaden their knowledge and background on clinical subject matter by reading professional literature and attending conferences and seminars.
- Incurring all travel costs and expenses. Use personal or public transportation to clinical affiliates.
- Commuting time and costs are not determining factors for clinical assignments. These time and cost factors are borne solely by the student.
- Meeting with their advisor at least once per semester.
- Maintaining safety and confidentiality of student records, instructional materials, and other program materials.
- Providing safe and quality patient care including safe radiation practices for patients, self, and the healthcare team.
- Demonstrating clinical progression.
- Corresponding in a timely fashion with all program faculty and administration.
- Adhering to all policies and procedures of the clinical affiliate, the Department, the College, and the University.

CLINICAL POLICIES

DEPARTMENT POLICY ON CONDUCT

Students must comply with the rules and regulations of the Department of Medical Imagining & Radiation Sciences. Deviation constitutes misconduct. This includes, but is not limited to:

- Sleeping during a clinical assessment.
- Failure to actively participate in clinical education.
- Leaving a clinical assignment or room/area assignment without qualified staff's permission.
- Failure to notify Clinical Affiliate and the Program Director/Clinical Coordinator of absence, lateness,, early departure, and daily change in schedule .
- Failure to accurately document completion of scheduled clinical rotations (time of start of day's rotation, lunch break, time of end of day's rotation).
- Failure to accurately document competencies in accordance with department regulations.
- Using any personal electronic devices in the patient-care/clinical education setting.
- Using the hospital computer for any reason EXCEPT hospital business.
- Violation of the supervision policy.
- Violation of any duly established rules or regulations.

FAMILY MEMBERS/FRIENDS WORKING AT CLINICAL AFFILIATE POLICY

It may be deemed a conflict of interest for a student to be supervised or evaluated by family members or friends employed at his/her clinical affiliate. If this situation arises, the student should inform his/her Program Director/Clinical Coordinator so that alternative arrangements can be considered.

FAMILY MEMBERS/FRIENDS CLASSROOM, LAB, & CLINICAL POLICY

At the Clinical Affiliate

- Family and friends are not permitted to visit the student at the clinical affiliate during clinical hours. Unsupervised children are not permitted.
- Family and friends must wait in a public area and are **not** permitted in scanning or treatment rooms.
- It is not acceptable for students to entertain their family and friends and neglect their professional duties.
- Students may not ask clinical affiliate staff to baby-sit for them.
- TJU's liability insurance does not extend to students' family and friends.

In the Medical Imaging & Radiation Sciences (MIRS) Department

- The University teaching and learning environment is not an appropriate setting for children.
- Faculty and students shall refrain from bringing children to classrooms, studios, laboratories and other institutional settings except in the event of unanticipated emergencies and in those instances, only with appropriate approval.
- When unanticipated emergencies do arise and an exception is being sought, the procedure for seeking approval can be found at Children in Instructional Settings (jefferson.edu)

In the Medical Imagining & Radiation Sciences (MIRS) laboratories

- Only Medical Imaging & Radiation Sciences students with proper Jefferson ID are permitted in the laboratories.
- The students are not permitted to bring family members or friends into the laboratories at any time.
- Scanning or performing any procedures on family members or friends is not permitted.
- Other Jefferson students or employees who are not part of the Medical Imaging & Radiation Sciences department are not permitted in the MIRS laboratory unless they have a signed waiver to be used as a student volunteer.
- TJU's liability insurance does not extend to students' family and friends.

Failure to comply with the above policy may result in disciplinary action up to and including dismissal from the department.

PERSONAL ELECTRONIC DEVICES POLICY

Students may not carry or use any type of personal electronic device during clinical hours. These devices must be placed with your personal belongings. The use of any type of recording device (camera, video, etc.) is strictly prohibited. Students in violation of this policy may be asked to leave the clinical affiliate and will be marked absent for that day. It is the students' responsibility to notify the Program Director and/or Clinical Coordinator of any absence.

For exceptional circumstances necessitating immediate personal communication by phone or text, students should ask the Clinical Affiliate Supervisor to be excused, attend to the personal business, and return to duty as quickly as possible.

COMPUTER POLICY

Students may not use computers for personal business during clinical hours. Personal business includes (but is not limited to) internet surfing, shopping, emailing, instant-messaging, texting, and printing. Personal storage devices (USB, flash drives, CDs) are not permitted in the clinical setting.

Students in violation of this policy may be asked to leave the clinical affiliate and will be marked absent. It is the student's responsibility to notify the Program Director and/or Clinical Coordinator of any absence.

STUDENT WORK POLICY

If a student is employed at any clinical facility, they must abide by the following policies:

- Students must notify Program officials that they are working at the clinical affiliate.
- Students are not permitted to work during scheduled clinical hours.
- Students may **not** wear student uniforms or Jefferson ID.
- Students may not accrue competencies during non-clinical hours.
- Students may not apply work time to make-up time.
- Students are not covered by Jefferson liability insurance during non-clinical hours.

Non-Compliance

Students who do not maintain compliance with the clinical policies are subject to disciplinary action, including removal from the clinical affiliate and potential dismissal from the department.

Any clinical time missed due to a violation of these policies will be made up by the student at a later date. The Program Director and/or Clinical Coordinator in cooperation with the Clinical Affiliate Supervisor will determine make-up time. Further disciplinary action may be taken for habitual violations of policies. Refer to the section entitled "Violations of Clinical Practices and Policies".

VENIPUNCTURE POLICY

The CAAHEP/ARRT clinical competency requirements include performance of venipuncture for injection of contrast agents and radiopharmaceuticals. To participate in the performance of venipuncture on patients, students must:

- Have completed all immunizations as required by JCHP.
- Have current BLS certification, as required by the Department of Medical Imaging & Radiation Sciences.
- Have health insurance, as required by JCHP.
- Have completed a venipuncture certification course, as required by the Department of Medical Imaging & Radiation Sciences.
- Attend and complete institutional venipuncture training, as required by clinical affiliates.

HEALTH INSURANCE CONFIDENTIALITY POLICY:

HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPPA)

Students must maintain strict confidentiality of all health information of patients at clinical affiliate sites during and after the course of their clinical rotations. Students may neither use nor disclose health information of patients to which they have access, other than as expressly authorized by the clinical affiliate. Students may not record any patient-identifiable information on their personal documents (e.g. clinical logs). Students must be familiar with and adhere to their clinical affiliate's HIPAA policy. Refer to policy #134.01 – Privacy and Confidentiality of Health Information Policy. Jefferson's HIPPA/Privacy and Confidentiality of Health Information Policy can be found at,

tjuh3.jeffersonhospital.org/policy/index.cfm/universitypnp/view/id/262636. Please note that this link will only function from within the University's intranet.

PREGNANCY POLICY

A student who becomes pregnant during a component of the program may voluntarily inform the Program Director, in writing, of their pregnancy.

- Option 1: The student may continue in the program if they choose, without modifications to any component of the program.
- Option 2: The student may take a leave of absence from clinical education but continue their didactic studies. Clinical assignments will be completed when the student returns.
- Option 3: The student may withdraw from the program and reapply in accordance with college policies.
- Option 4: The student, in writing, may withdraw their declaration of pregnancy at any time and/or for any reason.

Due to the need for special radiation protection education, counseling by the Radiation Safety Officer (RSO) is available.

Please refer to **Appendix G** that includes appropriate information regarding radiation safety for the student and fetus.

MAGNETIC RESONANCE IMAGING (MRI) SAFETY POLICY

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, mechanical implants, devices, or objects. Therefore, all Medical Imaging and Radiation Sciences students are required to undergo an MRI Safety lecture and MRS Safety Screening prior to MRI rotations or observations **Appendix O**.

1. Students will attend an MRI Safety lecture and be screened for MRI Safety clearance in the fall semester by the MRI Program Director/Clinical Coordinator.
2. Students will abide by the clinical affiliate MRI Safety Protocols during the clinical rotations and/or observations.
3. Students will notify the MRI Program Director/Clinical Coordinator and be re-screened for MRI Safety clearance, should their status change during the academic year, with regard to any potentially hazardous implants, devices, or objects, prior to MRI rotations or observations.

N95 RESPIRATOR POLICY

Medical Imaging & Radiation Sciences students will be fit tested for an N95 respirator mask. Although students will be fit tested for a N95 respirator mask, the following patient care restrictions must be followed:

- Jefferson students participating in clinical education may engage in the direct care of patients suspected of and confirmed to be infected with COVID-19.
    - Jefferson is NOT REQUIRING students to participate in the direct care of patients suspected of and confirmed to be infected with COVID-19.

    - If a clinical site says that students cannot engage in the direct care of patients suspected of and confirmed to be infected with COVID-19, students must continue to follow the clinical site instruction.
    - If a clinical site says that students must engage in the direct care of patients suspected of and confirmed to be infected with COVID-19, and students do not want to engage in the direct care of patients suspected of and confirmed to be infected with COVID-19 immediately contact the MIRS Department Chair, the program director and clinical coordinator.
    - The MIRS Department is stocked and can and will provide all students with PPE that includes ear loop masks, face shields, and N95 respirators, in addition to any other needed and required PPE.
- Such care shall be provided in accordance with federal, state, and local health and safety requirements. This includes, but is not limited to, ensuring that students have appropriate personal protective equipment and are advised of necessary precautions.
- Students who have concerns about engaging in the treatment of COVID-19 positive patients should inform their college or program and the Office of Student Affairs.
- If a student requires an accommodation pursuant to the Americans with Disabilities Act, the Office of Student Affairs can facilitate the accommodation process.
- Students shall be advised that if they are unable to engage in the care of COVID-19 positive patients, their academic progress may be impacted.
- Students will not participate in high-risk aerosol-generating procedures (such as endotracheal intubations), even if proper PPE is available.

INCIDENT REPORTS AT THE CLINICAL AFFILIATE

Students who become ill, injured, or involved in an incident during a clinical rotation must:

1. Report immediately to their Clinical Affiliate Supervisor and follow departmental protocol.
2. Immediately contact the Program Director and/or Clinical Coordinator.
3. Students must contact Jefferson Occupational Health Network (JOHN) for Employees & Students as soon as possible (215-955-6835) and follow all instructions given to them by JOHN.
4. Present a note to the Program Director and/or Clinical Coordinator from the Emergency Room Physician, Jefferson Occupational Health Physician, or family physician stating the date the student may resume normal duties.

If a patient is injured while in the student's care, the student must:

1. Make sure that the patient is safe.
2. Report the incident immediately to the Clinical Affiliate Supervisor and follow departmental protocol.
3. Immediately contact the Program Director and/or Clinical Coordinator.

COMMUNICABLE DISEASES

Should students be diagnosed as having an infectious disease, they must report such a diagnosis to the Program Director and/or Clinical Coordinator and the Clinical Affiliate Supervisor. The student may be asked to leave the clinical until cleared by his/her physician and Jefferson Occupational Health Network for Employees & Students. The student must present a physician's note to the Program Director and/or Clinical Coordinator stating that the student may resume normal duties.

OCCUPATIONAL EXPOSURES TO INFECTIOUS DISEASE AND/OR BLOOD BORNE PATHOGENS

Needlesticks

Get more information on occupational exposures from needlesticks, sharp injuries, splashes, etc. (accessible by Jefferson staff and students only)

What to do for an Occupational Exposure to Body Fluids (Needlestick or Splash)

If you have sustained an exposure to a body fluid from one of your patients, please follow the instructions below.

1. Wash the exposed area with soap and water. DO NOT USE BLEACH.
2. If a fluid splashes in your eye, rinse with tap water or with sterile saline.
3. If a fluid splashes in your eye, remove your contacts immediately.
4. Advise your supervisor that you have been exposed.
5. Complete the accident report online through PeopleSoft Employee Self-Serve System if you are an employee. Students will complete an accident report in JOHN.
6. Report to JOHN at 833 Chestnut Street, Suite 204 (when JOHN is closed report to the Emergency Department) as soon as possible.
7. Know your patient's name, DOB and MR# as well as the name of the attending physician of the source patient.
8. Source patient testing (hospitalized) can be ordered through Epic by selecting:
   "Needlestick Inpatient Evaluation" on the drop-down menu.
   (Includes STAT HIV antigen/antibody, hepatitis C antibody, hepatitis B surface antigen)
9. Source patient testing (outpatient population) should include STAT HIV antigen/antibody, hepatitis C antibody, hepatitis B surface antigen.

JOHN will discuss the risks of your exposure and advise whether further treatment or evaluation is necessary. A student's insurance may be billed for services resulting from occupational exposure. Please call 215-955-6835 with any questions.

If you are a Jefferson student at an affiliate, please call our office as soon as possible. You may opt to be seen at an emergency department, and the visit will be billed to your insurance. Follow up in JOHN is recommended on the next business day. Questions may be directed to JOHN's medical director.

Detailed information on Occupational Health Network for Employees & Students may be viewed on the JOHN website: https://hospitals.jefferson.edu/departments-and-services/occupational -health-network.html

Contact Occupational Health Network from Employees & Students

- Phone: 215-955-6835
- Fax: 215-923-5778
- E-mail: jeffuhs@jefferson.edu

Hours of Operation:

- Monday through Friday, 7:30 a.m. to 4:00 p.m.
    - Closed every Thursday from noon to 1 p.m.

Office Location:

- 33 South 9th Street, Suite 205, Philadelphia, PA 19107

ATTENDANCE REGULATIONS

DIDACTIC/LABORATORY INSTRUCTION

Each course syllabus details the individual course's attendance policy.

CLINICAL ATTENDANCE RECORDS

EXXAT software and/or time sheets will be used for the documentation of clinical attendance. Each student must personally document the required attendance "in" and "out" time. Students must document the time and have the designated program official (clinical coordinator, clinical preceptor, or clinical staff) approve the documented time. Time not documented must be made up. Under no circumstances is it permissible to document clinical attendance for another student. Any student found guilty of such an offense is subject to disciplinary action including dismissal from the department.

CLINICAL EDUCATION HOURS

Total clinical assignments will not exceed 40 hours per week. Assignments on any one day will not exceed 8 hours, unless otherwise requested by the student and approved by the Program Director and/or Clinical Coordinator in conjunction with the Clinical Affiliate Supervisor, or if patient care responsibilities dictate otherwise. No student will be permitted to leave a patient during the course of an examination, even if such completion requires remaining on duty beyond the end of the shift.

Students will be assigned a lunch period each day, which they are required to take. The lunch break will be commensurate with the practice of the department and area/rotation assignment. The lunch break may not be used to make-up or accrue time.

Clinical Affiliate Supervisors may re-schedule students (within an assigned eight hours) to provide complete exposure to the unique learning opportunities in Medical Imaging & Radiation Sciences. The Clinical Affiliate Supervisor and student must notify the Program Director and/or Clinical Coordinator of these changes.

Students will participate in designated procedures during their clinical assignments under the guidance of a supervising technologist in the areas to which they are assigned.

PERSONAL DAYS

Students are allocated one personal day each semester. This time cannot be taken in half-days. Time off must be taken in full days (8.5 hours [8 clinical hours plus 30-minute break]). It is not accruable nor is it transferable. A personal time request form must be submitted to the Program Director or Clinical Coordinator via the EXXAT software or other designated method. The Clinical Affiliate Supervisor and Program Director and/or Clinical Coordinator must be notified with a student is out of clinical. This notification must occur via email or phone call per the Clinical Affiliate, Program Director, and Clinical Coordinator instructions.

ABSENCE POLICY

Attendance is required for all scheduled clinical education sessions. The standard clinical day rotation for students is eight (8) hours of clinical activity and a half hour meal break. The start time and end time of the clinical shift will be determined by the Clinical Affiliate, Program Director, and Clinical Coordinator to be beneficial to the student's clinical education. Any change in an individual students' start time and end time must be discussed and approved by the Clinical Affiliate and the Program Director and Clinical Coordinator prior to any change.

Students absent from a clinical assignment, for any reason, must call or email the Clinical Affiliate Supervisor and call or email the Program Director and/or Clinical Coordinator prior to the start of the shift. An individual clinical education plan will be coordinated between the Program Director, Clinical Coordinator, Clinical Affiliate Supervisor and student to support the completion of missed time and clinical requirements.

If an emergency arises requiring an early departure from the clinical affiliate, the student must notify both the Clinical Affiliate Supervisor and the Program Director and/or Clinical Coordinator. It is the responsibility of the student to make these calls. An individual clinical education plan will be coordinated between the Program Director, Clinical Coordinator, Clinical Affiliate Supervisor and student to support the completion of missed time and clinical requirements. The attendance record must accurately reflect the early departure time from the clinical setting.

Students receive one personal day per semester. Requests must be submitted via the mechanism set up by the Clinical Coordinator. Requests for a personal day should be pre-approved by the Clinical Coordinator. Students are responsible for informing the Clinical Affiliate Supervisor of personal days. Personal days are per semester and do not accrue.

For time out of clinical, other than the one personal day, an individual clinical education plan will be coordinated between the Program Director, Clinical Coordinator, Clinical Affiliate Supervisor and student to support the completion of clinical requirements.

Students who are feeling generally unwell, who are symptomatic of COVID-19 (e.g., fever, cough, shortness of breath, loss of taste or smell), who believe they have had recent possible exposure to COVID-19, or who have a confirmed diagnosis of COVID-19 should not attend clinical.

Students must maintain contact with the Program Director and Clinical Coordinator and all parties must be kept up to date with any absences and requirements and recommendations for the return to clinical.

Students who have any symptoms that are associated with infectious diseases (e.g., cold, flu or viral infection) should not attend in-person classes, clinical experiences or other activities that put them in close contact with other students, faculty, staff or patients. These symptoms can include but are not limited to sneezing, coughing, fever, gastrointestinal pain, and diarrhea

Students who have these symptoms are responsible for notifying their instructors, program or college using the usual mechanisms before missing any scheduled course/clinical education activity, for staying current with course/clinical requirements, and for complying with any other course/clinical attendance policies. Students may be asked to provide documentation that they are under the care of a medical provider (without disclosure of any medical condition).

Students may also consult the Medical Leave of Absence policy as a certain level of absenteeism will disrupt the continuity of learning and achievement of clinical requirements, including, but not limited to

the completion of clinical competencies. Students may be assigned a grade of "I" incomplete in extenuating circumstances.

PUNCTUALITY

Students not in the assigned clinical area at the assigned time will be considered late. Three late arrivals in one semester count as one day's absence. Habitual lateness could lead to dismissal from the Department.

It is the policy of the Department of Medical Imaging & Radiation Sciences that any student who is going to be late must notify both the Clinical Affiliate Supervisor and the Program director/Clinical Coordinator prior to the start of the assigned time. All lost time due to lateness from the clinical area must be made up by the student. Failure to abide by these policies could lead to dismissal from the department.

Students will be advised in writing concerning their habitual lateness or violation of the Department of Medical Imaging & Radiation Sciences lateness policies by the Clinical Coordinator and/or Program Director.

Disciplinary actions, including suspensions from the clinical affiliate or dismissal from the Department, may be taken against students who persist in habitual lateness or violations of the Department of Medical Imaging & Radiation Sciences lateness policies, after previously having been counseled in writing by the Clinical Coordinator and/or Program Director and/or Department Chair at an advisement conference.

MAKE-UP TIME

Arrangements must be made with the Clinical Affiliate Supervisor and approved by the Program Director and/or Clinical Coordinator. Make up time may not be assigned to clinical settings on holidays that are observed by the sponsoring institution. Make up time may not be assigned during non-traditional hours of clinical assignments such as weekends. Jefferson's liability insurance covers students during make up time assignments. All clinical absences must be made up at the clinical affiliate where the time was missed, consistent with the room assignments in effect when the absence occurred.

The make-up time form is signed upon fulfillment of the time missed. The form will be submitted via EXXAT or other means determined by the Clinical Coordinator as required.

The lunch break may not be used to make-up or accrue time.

POLICY CONCERNING DEATH IN THE FAMILY

Upon notification of the Program Director, students will be allowed up to three (3) days of leave of absence for death in the immediate family. Immediate family members include parents, grandparents, spouse, brother, sister or child. Leaves of absence requested because of the death of someone other than an immediate family member may be granted by special permission.

HOSPITAL JOB ACTIONS OR STRIKES

Whenever a strike or job action occurs at an assigned clinical site, students must leave the assignment immediately and report to the Program Director or Clinical Coordinator for further directions. Missed clinical time must be made up. At no time should a student attempt to cross a picket line to enter a Clinical Affiliate.

JURY DUTY

Being selected for jury duty is a civic responsibility in which the Department encourages students to participate. Please be advised that the College cannot intervene on the student's behalf should a student be summoned for jury duty.

STUDENT ACTIVITIES

STUDENT ACTIVITIES

Students are encouraged to participate in campus activities, e.g., orientation programs, recruitment functions, social and cultural events, interprofessional activities and the Pinning Ceremony. Students have the opportunity to represent the students' viewpoints on Department, College, and University committees. The University and Thomas Jefferson University Hospital sponsor many volunteer and mentoring programs. Professional organizations, Jefferson Alumni Association, and the College sponsor many programs that focus on career and professional development.

PINNING CEREMONY

Graduating students are invited to participate in the Department's Pinning Ceremony. During the ceremony, graduating students' names are announced and a pin is given to each graduate by their program faculty. The pin symbolizes welcoming the graduate into the profession. Honors and awards of the graduates, along with clinical educators, are also announced. Friends and family of the graduates are invited to participate in the celebration. The Pinning Ceremony is a special time to celebrate and acknowledge the hard work and achievements of the Department graduates, faculty, and administrative personnel.

HONORS AND AWARDS

Students are eligible for:

- Department awards for outstanding overall performance
- Awards for clinical excellence

Awards are presented during the Pinning Ceremony.

PROFESSIONAL SOCIETIES

Students are strongly encouraged to participate in professional activities and to seek memberships in national, state, and local societies. These organizations sponsor competitions for students and several offer scholarships and educational grants.

PROFESSIONAL ORGANIZATIONS

- American Society of Radiologic Technologists (ASRT) https://asrt.org
- Philadelphia Society of Radiologic Technologists (PhilaSRT) http://philasrt.org/
- Association of Collegiate Educators in Radiologic Technology (ACERT) https://acert.org/

HONOR SOCIETIES

- Lambda Nu Society (Honor Society for radiologic and imaging science professionals) https://www.lambdanu.org
    - Information to join Jefferson's PA Gamma Chapter of Lambda Nu is posted in the Canvas page, STUDENTS-Department of Medical Imaging and Radiation Sciences

ADDITIONAL POLICIES

SUPERVISION POLICY

Until the student achieves and documents competency in any given procedure, that procedure must be carried out under the direct supervision of a registered technologist.

The JRCERT defines direct supervision as student supervision by a qualified radiographer who:

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

Students must be directly supervised until competency is achieved. Once students have achieved competency, they may work under indirect supervision. The JRCERT defines indirect supervision as student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement.

Repeat images must be completed under direct supervision. The presence of a qualified radiographer during the repeat of an unsatisfactory image assures the patient's safety and proper educational practices. A repeat form MUST be submitted for a repeat of an unsatisfactory image.

Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy, procedures regardless of the level of competency.

CONFIDENTIALITY OF STUDENT RECORDS

Appropriately maintaining the security and confidentiality of student records and other program materials protects the students' right to privacy. Student records are maintained in accordance with the Family Education Rights and Privacy Act (Buckley Amendment). Student records at the clinical sites are maintained by the student/and or clinical supervisor and are not to be placed in open, public areas of the department.

DRESS CODE AND APPEARANCE POLICY

Dress and appearance standards promote a consistent professional image and help patients and employees feel safe, confident, and comfortable. One must always present a professional appearance. The following charts list the acceptable and unacceptable dress and appearance standards.

Dress Standards

	Acceptable	Unacceptable
Tops	Navy scrub top. Jefferson branded embroidery. Tops must be in good condition, wrinkle-free and fit appropriately. A solid color white or black crew tee shirt may be worn under the scrub top. Sleeves should not extend beyond the scrub top sleeves.	Tight, clingy, over-sized, or excessively baggy-fitting tops. Wrinkled, shrunk, faded, stained (including under arms), worn-out tops. Tops that reveal the abdomen when standing, lifting or bending over. Tops that expose the cleavage, bra, back, shoulder, chest, lower back or under garments are not allowed. Shirts under the scrub top that extend beyond the scrub top sleeve. Shirts under the scrub top that are not solid white or black or have graphics or other patterns.
Jackets	Navy scrub jacket. Jefferson branded embroidery. The jacket must be in good condition, wrinkle-free and fit appropriately. This jacket is optional, but it is the only approved jacket.	Tight, clingy, over-sized, or excessively baggy-fitting jacket. Wrinkled, shrunk, faded, stained (including under arms), or worn-out jacket. Sweatshirts, hoodies, fleece jackets, or any other type of covering.
Pants	Navy scrub pants. Pants must be in good condition, wrinkle-free and fit appropriately.	Tight, clingy, over-sized, or excessively baggy-fitting pants. Baggy pants worn below the hips or that expose underwear.

		Wrinkled, shrunk, faded, stained, or worn-out pants. Pants that reveal the lower back or undergarments when standing, lifting or bending over. Pant hemlines that touch or drag on the ground.
Undergarments	Must be worn at all times.	These items are not to be visible or show through clothing.
Footwear	Solid white, leather, low-top sneaker footwear with laces that tie. Closed toe and closed heel with a solid upper covering (no holes on the top or side of the shoe). Shoestrings should be properly tied. Shoes and laces must be clean and in good condition with no holes or tears.	Clogs, sandals, flip-flops, slippers or open-toed shoes are not permitted. Colors other than solid white. Dirty or odor-ridden footwear.
Socks	Must be worn at all times. Socks should be solid color in black or white.	Colors other than solid black or white. Print styles other than solid color. Ornamentation such as beads, bells, etc. Dirty or odor-ridden socks.
Jewelry	Earrings should be of the small post type (no hoops). Only one (1) post earring per ear. Rings, necklaces, and bracelets are not recommended. Wedding bands are acceptable. A wristwatch with a second hand and one that is water resistant is recommended.	More than one post earring per ear. Excessive rings, bracelets, necklaces.
Body Piercings	Any body piercing besides ears should not be evident. Tongue rings are unacceptable and are not allowed to be worn.	Visible or evident body piercings.

Tattoos	Any visible tattoos must be appropriately covered.	Visible tattoos on the body.
Identification badges	ID badges and name tags must be always worn at collar/eye-level. ID badges must be free from distracting stickers, pins, etc. Photo ID must be always legible and visible.	Badges worn at or below the bottom of the sternum or that are not visible to staff and patients. Pins, stickers and other distracting adhesives. Lanyards used to hold ID badges are not permitted.
Radiation dosimeter	Radiation dosimeters are to be worn during all clinical and lab assignments. The radiation dosimeter is to be worn outside of protective apparel with the label facing the radiation source at the level of the thyroid.	Not wearing a properly dated and properly placed radiation dosimeter.
Operating room (OR) attire	Specific operating room scrubs, hair, face, and shoe attire will be provided by the operating room/radiology department. The OR attire is to be worn ONLY when physically present in the OR. The full Jefferson clinical uniform is required at all other times.	Wearing hospital approved OR attire outside of the OR.

Grooming Standards

Body odor	Must practice personal hygiene and be free of offensive odor.	Perfume, lotion, or cologne that may interfere with those who are ill or allergic to such odors or fragrances.
Hair – head	Must practice personal hygiene and be free of offensive odor.	Extreme trends are not acceptable. Non-natural colors such as pink, blue, green, orange etc. is not acceptable.
Hair – face	Nose and ear hair must be trimmed and maintained.	Excessive beard or mustaches styles.

	Facial hair including mustache and beard must be neatly maintained. Facial hair is not permitted when fit testing for or wearing a N95 respirator mask. Consult JOHN for further advisement.	
Makeup	Makeup should be worn conservatively. If worn, makeup must appear professional and natural and should be conservative in styles and colors.	Frosted, bright colored eye shadow (i.e., bright green, purple, pink, etc.). Bright or excessively dark, thick eye liner worn under the eye or on top of the eyelid.
Hair accessories	Solid white, black or navy-blue hair bands or ties.	Ornamentation such as beads, bells, excessive bows, etc.
Fingernails	Nail length must be less than ¼ inches. No artificial nails. No nail polish.	
Gum	Chewing gum is not permitted.	

Non-compliance

Students not complying with the dress code and appearance policy will be removed from the clinical affiliate. Any clinical time missed due to a dress and appearance standards violation will be made up by the student at a later date. The Program Director and/or Clinical Coordinator in cooperation with the Clinical Affiliate Supervisor will determine make-up time if the site is willing to resume the clinical experience.

Appendix A

PATIENTS' BILL OF RIGHTS

https://www.americanpatient.org/aha-patients-bill-of-rights/

We consider you a partner in your hospital care. When you are well informed, participate in treatment decisions, and communicate openly with your doctor and other health professionals, you help make your care as effective as possible. This hospital encourages respect for the personal preferences and values of each individual.

While you are a patient in the hospital, your rights include the following:

- You have the right to considerate and respectful care.
- You have the right to be well informed about your illness, possible treatments, and likely outcome and to discuss this information with you doctor. You have the right to know the names and roles of people treating you.
- You have the right to consent to or refuse a treatment, as permitted by law, throughout your hospital. If you refuse a recommended treatment, you will receive other needed and available care.
- You have the right to have an advance directive, such as a living will or health care proxy. These documents express your choices about you future care or name someone to decide if you cannot speak for yourself. If you have a written advance directive, you should provide a copy to your family, and your doctor.
- You have the right to privacy. The hospital, you doctor, and others caring for you will protect your privacy as much as possible.
- You have the right to expect that treatment records are confidential unless you have given permission to release information or reporting is required or permitted by law. When the hospital releases records to others, such as insurers, it emphasizes that the records are confidential.
- You have the right to review you medical records and to have the information explained except when restricted by law.
- You have the right to expect that the hospital will give you necessary health hospital services to the best of its ability. Treatment, referral, or transfer may be recommended. If transfer is recommended or requested, you will be informed of risks, benefits, and alternatives. You will not be transferred until the other institution agrees to accept you.
- You have the right to know if this hospital has relationships with outside parties that may influence you treatment and care. These relationships may be with educational institutions, other health care providers, or insurers.
- You have the right to consent or decline to take part in research affecting your care. If you choose not to take part, you will receive the most effective care the hospital otherwise provides.
- You have the right to be told of realistic care alternatives when hospital care is

no longer appropriate.

- You have the right to know about hospital rules that affect you and your treatment and about charges and payment methods. You have the right to know about hospital resources, such as patient representatives or ethic committees that can help you resolve problems and questions about your hospital stay and care.
- You have responsibilities as a patient. You are responsible for providing information about your health, including past illnesses, hospital stays, and use of medicine. You are responsible for asking questions when you do not understand information or instructions. If you believe you can't follow through with your treatment, you are responsible for telling your doctor.

- This hospital works to provide care efficiently and fairly to all patients and the community. You and you visitors are responsible for being considerate of the needs of other patients, staff, and the hospital. You are responsible for providing information for insurance and for working with the hospital to arrange payment, when needed.
- Your health depends not just on your hospital care but, in the long term, on the decisions you make in your daily life. You are responsible for recognizing the effect of life-style on your personal health.

A hospital serves many purposes. Hospitals work to improve people's health; treat people with injury and disease; educate doctors, health professionals, patients, and community members; and improve understanding of health and disease. In carrying out these activities, this institution works to respect your values and dignity.

ARRT® STANDARDS OF ETHICS

Last Revised: September 1, 2023
Published: September 1, 2023

PREAMBLE

The *Standards of Ethics* of The American Registry of Radiologic Technologists (ARRT) shall apply solely to persons that are either currently certified and registered by ARRT or that were formerly certified and registered by ARRT, and to persons applying for certification and registration by ARRT (including persons who submit an Ethics Review Preapplication) in order to become Candidates. Radiologic Technology is an umbrella term that is inclusive of the disciplines of radiography, nuclear medicine technology, radiation therapy, cardiovascular-interventional radiography, mammography, computed tomography, magnetic resonance imaging, quality management, sonography, bone densitometry, vascular sonography, cardiac-interventional radiography, vascular-interventional radiography, breast sonography, and radiologist assistant. The *Standards of Ethics* are intended to be consistent with the Mission Statement of ARRT, and to promote the goals set forth in the Mission Statement.

STATEMENT OF PURPOSE

The purpose of the ethics requirements is to identify individuals who have internalized a set of professional values that cause one to act in the best interests of patients. This internalization of professional values and the resulting behavior is one element of ARRT's definition of what it means to be qualified. Exhibiting certain behaviors as documented in the *Standards of Ethics* is evidence of the possible lack of appropriate professional values.

The *Standards of Ethics* provides proactive guidance on what it means to be qualified and to motivate and promote a culture of ethical behavior within the profession. The ethics requirements support ARRT's mission of promoting high standards of patient care by removing or restricting the use of the credential by those who exhibit behavior inconsistent with the requirements.

A. CODE OF ETHICS

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

1. The Registered Technologist acts in a professional manner, responds to patient needs, and supports colleagues and associates in providing quality patient care.
2. The Registered Technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity of humankind.
3. The Registered Technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, familial status, disability, sexual orientation, gender identity, veteran status, age, or any other legally protected basis.
4. The Registered Technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.
5. The Registered Technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.

6. The Registered Technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The Registered Technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self, and other members of the healthcare team.
8. Registered Technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.
9. The Registered 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 Registered Technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge with colleagues, and investigating new aspects of professional practice.
11. The Registered Technologist refrains from the use of illegal drugs and/or any legally controlled substances which result in impairment of professional judgment and/or ability to practice radiologic technology with reasonable skill and safety to patients.

B. RULES OF ETHICS

The Rules of Ethics form the second part of the *Standards of Ethics*. They are mandatory standards of minimally acceptable professional conduct for all Registered Technologists and Candidates. ARRT certification and registration demonstrates to the medical community and the public that an individual is qualified to practice within the profession. The Rules of Ethics are intended to promote the protection, safety, and comfort of patients. Accordingly, it is essential that Registered Technologists and Candidates act consistently with these Rules.

The Rules of Ethics are enforceable. Registered Technologists are required to notify ARRT of any ethics violation, including state licensing issues and criminal charges and convictions, within 30 days of the occurrence or during their annual renewal of certification and registration, whichever comes first. Applicants for certification and registration are required to notify ARRT of any ethics violation, including state licensing issues and criminal charges and convictions, within 30 days of the occurrence.

Registered Technologists and Candidates engaging in any of the following conduct or activities, or who permit the occurrence of the following conduct or activities with respect to them, have violated the Rules of Ethics and are subject to sanctions as described hereunder:

The titles and headings are for convenience only, and shall not be used to limit, alter or interpret the language of any Rule.

Fraud or Deceptive Practices

Fraud Involving Certification and Registration

1. Employing fraud or deceit in procuring or attempting to procure, maintain, renew, or obtain or reinstate certification and registration as issued by ARRT; employment in radiologic technology; or a state permit, license, or registration certificate to practice radiologic technology. This includes altering in any respect any document issued by ARRT or any state or federal agency, or by indicating in writing certification and registration with ARRT when that is not the case.

Fraudulent Communication Regarding Credentials

2. Engaging in false, fraudulent, deceptive, or misleading communications to any person regarding any individual's education, training, credentials, experience, or qualifications, or the status of any individual's state permit, license, or registration certificate in radiologic technology or certification and registration with ARRT.

Fraudulent Billing Practices

3. Knowingly engaging or assisting any person to engage in, or otherwise participating in, abusive or fraudulent billing practices, including violations of federal Medicare and Medicaid laws or state medical assistance laws.

Subversion

Examination / CQR Subversion

4. Subverting or attempting to subvert ARRT's examination process, and/or ARRT's Education Requirements, including the Structured Self-Assessments (SSA) that are part of the Continuing Qualifications Requirements (CQR) process. Conduct that subverts or attempts to subvert ARRT's examination, Education Requirements and/or CQR or SSA processes, includes but is not limited to:
    i. disclosing examination and/or CQR SSA information using language that is substantially similar to that used in questions and/or answers from ARRT examinations and/or CQR SSA when such information is gained as a direct result of having been an examinee or a participant in a CQR SSA or having communicated with an examinee or a CQR participant; this includes, but is not limited to, disclosures to students in educational programs, graduates of educational programs, educators, anyone else involved in the preparation of Candidates to sit for the examinations, or CQR participants; and/or
    ii. soliciting and/or receiving examination and/or CQR SSA information that uses language that is substantially similar to that used in questions and/or answers on ARRT examinations or CQR SSA from an examinee, or a CQR participant, whether requested or not; and/or
    iii. copying, publishing, reconstructing (whether by memory or otherwise), reproducing or transmitting any portion of examination and/or CQR SSA materials by any means, verbal or written, electronic or mechanical, without the prior express written permission of ARRT or using professional, paid or repeat examination takers and/or CQR SSA participants, or any other individual for the purpose of reconstructing any portion of examination and/or CQR SSA materials; and/or
    iv. using or purporting to use any portion of examination and/or CQR SSA materials that were obtained improperly or without authorization for the purpose of instructing or preparing any Candidate for examination or participant for CQR SSA; and/or
    v. selling or offering to sell, buying or offering to buy, or distributing or offering to distribute any portion of examination and/or CQR SSA materials without authorization; and/or
    vi. removing or attempting to remove examination and/or CQR SSA materials from an examination or SSA room; and/or
    vii. having unauthorized possession of any portion of or information concerning a future, current, or previously administered examination or CQR SSA of ARRT; and/or
    viii. disclosing what purports to be, or what you claim to be, or under all circumstances is likely to be understood by the recipient as, any portion of or "inside" information concerning any portion of a future, current, or previously administered examination or CQR SSA of ARRT; and/or
    ix. communicating with another individual during administration of the examination or CQR SSA for the purpose of giving or receiving help in answering examination or CQR SSA questions, copying another Candidate's or CQR participant's answers, permitting another Candidate or a CQR participant to copy one's answers, or possessing or otherwise having access to unauthorized materials including, but not limited to, notes, books, mobile devices, computers and/or tablets during administration of the examination or CQR SSA; and/or
    x. impersonating a Candidate, or a CQR participant, or permitting an impersonator to take or attempt to take the examination or CQR SSA on one's own behalf; and/or
    xi. using any other means that potentially alters the results of the examination or CQR SSA such that the results may not accurately represent the professional knowledge base of a Candidate, or a CQR participant.

Education Requirements Subversion

5. Subverting, attempting to subvert, or aiding others to subvert or attempt to subvert *ARRT's Education Requirements for Obtaining and Maintaining Certification and Registration* ("Education Requirements"), including but not limited to, continuing education (CE), clinical experience and competency requirements, structured education activities, and/or Continuing Qualifications Requirements (CQR). Conduct that subverts or attempts to subvert ARRT's Education Requirements or CQR Requirements includes, but is not limited to:
    i. providing false, inaccurate, altered, or deceptive information related to CE, clinical experience or competency requirements, structured education or CQR activities to ARRT or an ARRT recognized recordkeeper; and/or
    ii. assisting others to provide false, inaccurate, altered, or deceptive information related to education requirements or CQR activities to ARRT or an ARRT recognized recordkeeper; and/or

iii. conduct that results or could result in a false or deceptive report of CE, clinical experience or competency requirements, structured education activities or CQR completion; and/or

iv. conduct that in any way compromises the integrity of ARRT's education requirements, including, but not limited to, CE, clinical experience and competency requirements, structured education activities, or CQR Requirements such as sharing answers to the post-tests or self-learning activities, providing or using false certificates of participation, or verifying credits that were not earned or clinical procedures that were not performed.

Failure to Cooperate with ARRT Investigation

6. Subverting or attempting to subvert ARRT's certification and registration processes by:
   i. making a false statement or knowingly providing false information to ARRT; or
   ii. failing to cooperate with any investigation by ARRT in full or in part.

Unprofessional Conduct

Failure to Conform to Minimal Acceptable Standards

7. Engaging in unprofessional conduct, including, but not limited to:
   i. a departure from or failure to conform to applicable federal, state, or local governmental rules regarding radiologic technology practice or scope of practice; or, if no such rule exists, to the minimal standards of acceptable and prevailing radiologic technology practice.
   ii. any radiologic technology practice that may create unnecessary danger to a patient's life, health, or safety. Actual injury to a patient or the public need not be established under this clause.

Sexual Misconduct

8. Engaging in conduct with a patient that is sexual or may reasonably be interpreted by the patient as sexual, or in any verbal behavior that is seductive or sexually demeaning to a patient; or engaging in sexual exploitation of a patient or former patient. This also applies to any unwanted sexual behavior, verbal or otherwise.

Unethical Conduct

9. Engaging in any unethical conduct, including, but not limited to, conduct likely to deceive, defraud, or harm the public; or demonstrating a willful or careless disregard for the health, welfare, or safety of a patient. Actual injury need not be established under this clause.

Scope of Practice

Technical Incompetence

10. Performing procedures which the individual is not competent to perform through appropriate training and/or education or experience unless assisted or personally supervised by someone who is competent (through training and/or education or experience).

Improper Supervision in Practice

11. Knowingly assisting, advising, or allowing a person without a current and appropriate state permit, license, registration, or ARRT certification and registration to engage in the practice of radiologic technology, in a jurisdiction that mandates such requirements.

Improper Delegation or Acceptance of a Function

12. Delegating or accepting the delegation of a radiologic technology function or any other prescribed healthcare function when the delegation or acceptance could reasonably be expected to create an unnecessary danger to a patient's life, health, or safety. Actual injury to a patient need not be established under this clause.

Fitness to Practice

Actual or Potential Inability to Practice

13. Actual or potential inability to practice radiologic technology with reasonable skill and safety to patients by reason of illness; use of alcohol, drugs, chemicals, or any other material; or as a result of any mental or physical condition.

Inability to Practice by Judicial Determination

14. Adjudication as mentally incompetent, mentally ill, chemically dependent, or dangerous to the public, by a court of competent jurisdiction.

Improper Management of Patient Records

False or Deceptive Entries

15. Improper management of records, including failure to maintain adequate patient records or to furnish a patient record or report required by law; or making, causing, or permitting anyone to make false, deceptive, or misleading entry in any patient record and/or any quality control record.

Failure to Protect Confidential Patient Information

16. Revealing a privileged communication from or relating to a former or current patient, except when otherwise required or permitted by law, or viewing, using, releasing, or otherwise failing to adequately protect the security or privacy of confidential patient information.

Knowingly Providing False Information

17. Knowingly providing false or misleading information that is directly related to the care of a former or current patient.

Violation of State or Federal Law or Regulatory Rule

Narcotics or Controlled Substances Law

18. Violating a state or federal narcotics or controlled substance law, even if not charged or convicted of a violation of law.

Regulatory Authority or Certification Board Rule

19. Violating a rule adopted by a state or federal regulatory authority or certification board resulting in the individual's professional license, permit, registration or certification being denied, revoked, suspended, placed on probation or a consent agreement or order, voluntarily surrendered, subjected to any conditions, or failing to report to ARRT any of the violations or actions identified in this Rule.

Criminal Proceedings

20. Convictions, criminal proceedings, or military courts-martial as described below:
    i. conviction of a crime, including, but not limited to, a felony, a gross misdemeanor, or a misdemeanor; and/or
    ii. criminal proceeding where a finding or verdict of guilt is made or returned but the adjudication of guilt is either withheld, deferred, or not entered or the sentence is suspended or stayed; or a criminal proceeding where the individual enters an Alford plea, a plea of guilty or nolo contendere (no contest); or where the individual enters into a pre-trial diversion activity; and/or
    iii. military courts-martial related to any offense identified in these Rules of Ethics; and/or
    iv. required sex offender registration.

Duty to Report

Failure to Report Violation

21. Knowing of a violation or a probable violation of any Rule of Ethics by any Registered Technologist or Candidate and failing to promptly report in writing the same to ARRT.

Failure to Report Error

22. Failing to immediately report to the Registered Technologist's or Candidate's supervisor information concerning an error made in connection with imaging, treating, or caring for a patient. For purposes of this rule, errors include any departure from the standard of care that reasonably may be considered to be potentially harmful, unethical, or improper (commission). Errors also include behavior that is negligent or should have occurred in connection with a patient's care, but did not (omission).The duty to report under this rule exists whether or not the patient suffered any injury.

C. ADMINISTRATIVE PROCEDURES

These Administrative Procedures provide for the structure and operation of the Ethics Committee; they detail procedures followed by the Ethics Committee and by the Board of Trustees of ARRT in administering challenges raised under the Rules of Ethics, and in handling matters relating to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the *ARRT Rules and Regulations*, in which case, there is no right to a hearing) or the denial of renewal or reinstatement of certification and registration. All Registered Technologists and Candidates are required to comply with these Administrative Procedures. All Registered Technologists and Candidates are expected to conduct themselves in a professional and respectful manner in their interactions with the ARRT Board of Trustees, Ethics Committee and/or staff. Failure to cooperate with the Ethics Committee or the Board of Trustees may be considered by the Ethics Committee and by the Board of Trustees according to the same procedures and with the same sanctions as failure to observe the Rules of Ethics.

1. Ethics Committee

(a) Membership and Responsibilities of the Ethics Committee

The President, with the approval of the Board of Trustees, appoints three Trustees to serve as members of the Ethics Committee, each such person to serve on the Committee until removed and replaced by the President, with the approval of the Board of Trustees, at any time, with or without cause. The President, with the approval of the Board of Trustees, will also appoint a fourth, alternate member to the Committee. In the event that the full Committee is not available for a meeting, an alternate member may participate on the Committee. If an alternate member is not available, the remaining members of the Committee will hold the meeting and act irrespective of the composition of the Committee. The Ethics Committee is responsible for: (1) investigating and reviewing each alleged violation of the Rules of Ethics and determining whether a Registered Technologist or Candidate has failed to observe the Rules of Ethics and determining an appropriate sanction; and (2) periodically assessing the Code of Ethics, Rules of Ethics, and Administrative Procedures and recommending any amendments to the Board of Trustees.

(b) The Chair of the Ethics Committee

The President, with the approval of the Board of Trustees, appoints one member of the Ethics Committee as the Committee's Chair to serve for a maximum term of two years as the principal administrative officer responsible for management of the promulgation, interpretation, and enforcement of the *Standards of Ethics*. In the event that the Chair is not available for a meeting, the Chair may appoint any remaining member to act as Chair. The President may remove and replace the Chair of the Committee, with the approval of the Board of Trustees, at any time, with or without cause. The Chair presides at and participates in meetings of the Ethics Committee and is responsible directly and exclusively to the Board of Trustees, using staff, legal counsel, and other resources necessary to fulfill the responsibilities of administering the *Standards of Ethics*.

(c) Preliminary Screening of Potential Violations of the Rules of Ethics

The Chair of the Ethics Committee shall review each alleged violation of the Rules of Ethics that is brought to the attention of the Ethics Committee. If, in the sole discretion of the Chair: (1) there is insufficient information upon which to base a charge of a violation of the Rules of Ethics; or (2) the allegations against the Registered Technologist or Candidate are patently frivolous or inconsequential; or (3) the allegations, if true, would not constitute a violation of the Rules of Ethics, the Chair may summarily dismiss the matter. The Chair may be assisted by staff and/or legal counsel of ARRT. The Chair shall report each such summary dismissal to the Ethics Committee.

At the Chair's direction and upon request, the Chief Executive Officer of ARRT shall have the power to investigate allegations regarding the possible settlement of an alleged violation of the Rules of Ethics. The Chief Executive Officer may be assisted by staff members and/or legal counsel of ARRT. The Chief Executive Officer is not empowered to enter into a binding settlement, but rather may convey and/or recommend proposed settlements to the Ethics Committee. The Ethics Committee may accept the proposed settlement, make a counterproposal to the Certificate Holder or Candidate, or reject the proposed settlement and proceed under these Administrative Procedures.

2. Hearings

Whenever ARRT proposes to take action in respect to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the *ARRT Rules and Regulations,* in which case there is no right to a hearing) or of an application for renewal or reinstatement of certification and registration, or in connection with the revocation or suspension of certification and registration, or the censure of a Registered Technologist or Candidate for an alleged violation of the Rules of Ethics, it shall give written notice thereof to such person, specifying the reasons for such proposed action. A Registered Technologist or Candidate to whom such notice is given shall have 30 days from the date the notice of such proposed action is mailed to make a written request for a hearing. The written request for a hearing must be accompanied by a nonrefundable hearing fee in an amount to be determined by ARRT. In rare cases, the hearing fee may be waived, in whole or in part, at the sole discretion of ARRT.

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

A Registered Technologist or Candidate may waive the 30-day timeframe to request a hearing. To request a waiver of the 30-day timeframe, the Registered Technologist or Candidate must complete a Hearing Waiver form that is available on the ARRT website at www.arrt.org.The Hearing Waiver form must be signed by the Registered Technologist or Candidate, notarized, and submitted to ARRT. The Chief Executive Officer of ARRT shall have the authority to receive, administer, and grant the Hearing Waiver form and may be assisted by staff members and/or legal counsel of ARRT. Any sanction proposed by the Ethics Committee would become effective on the date the hearing waiver is processed.

Failure to appear at the hearing in person or via teleconference, videoconference, or to supply a written submission in response to the charges shall be deemed a default on the merits and shall be deemed consent to whatever action or disciplinary measures that the Ethics Committee determines to take. Hearings shall be held at such date, time, and place as shall be designated by the Ethics Committee or the Chief Executive Officer. The Registered Technologist or Candidate shall be given at least 30 days' notice of the date, time, and place of the hearing. The hearing is conducted by Ethics Committee members other than any members of the Ethics Committee who believe for any reason that they would be unable to render an objective and unbiased decision. In the event of such disqualification, the President may appoint Trustees to serve on the Ethics Committee for the sole purpose of participating in the hearing and rendering a decision. At the hearing, ARRT shall present the charges against the Registered Technologist or Candidate in question, and the facts and evidence of ARRT in respect to the basis or bases for the proposed action or disciplinary measure. The Ethics Committee may be assisted by legal counsel. The Registered Technologist or Candidate in question, by legal counsel or other representative (at the sole expense of the Registered Technologist or Candidate in question), shall have up to 30 minutes to present testimony, and be heard in the Registered Technologist's or Candidate's own defense; to call witnesses; hear the testimony of and to cross-examine any witnesses appearing at such hearing; and to present such other evidence or testimony as the Ethics Committee shall deem appropriate to do substantial justice. Any information may be considered that is relevant or potentially relevant. The Ethics Committee will be afforded 15 minutes in addition to any unused time remaining from the Registered Technologist's or Candidate's time allotment, to ask questions and shall not be bound by any state or

federal rules of evidence. The Registered Technologist or Candidate in question shall have the right to make a closing statement before the close of the hearing. A transcript or an audio recording of the hearing testimony is made for in person, teleconference, and videoconference hearings only. Ethics Committee deliberations are not recorded.

In the case where ARRT proposes to take action in respect to the denial of an application for certification and registration (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.03 and 2.04 of the *Rules and Regulations* of ARRT) or the denial of renewal or reinstatement of certification and registration, the Ethics Committee shall assess the evidence presented at the hearing, or continue the matter and request the Registered Technologist or Candidate provide additional evidentiary information prior to making its decision, and shall subsequently prepare written findings of fact and its determination as to whether grounds exist for the denial of an application for certification and registration or renewal or reinstatement of certification and registration, and shall promptly transmit the same to the Registered Technologist or Candidate in question and to the Board of Trustees at the next Board of Trustees meeting.

In the case of alleged violations of the Rules of Ethics by a Registered Technologist or Candidate, the Ethics Committee shall assess the evidence presented at the hearing, or continue the matter and request the Certificate Holder or Candidate provide additional evidentiary information prior to making its decision, and shall subsequently prepare written findings of fact and its determination as to whether there has been a violation of the Rules of Ethics and, if so, the appropriate sanction, and shall promptly transmit the same to the Registered Technologist or Candidate in question and to the Board of Trustees at the next Board of Trustees meeting.

Potential actions available to the Ethics Committee are set forth in Section 4 (Range of Actions). Unless a timely appeal from any findings of fact and determination by the Ethics Committee is taken to the Board of Trustees in accordance with Section 3 below (Appeals), the Ethics Committee's findings of fact and determination in any matter (including the specified sanction) shall be final and binding upon the Registered Technologist or Candidate in question.

3. Appeals

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

Failure to make a written request for an appeal and to remit the appeal fee (unless the appeal fee is waived in writing by ARRT) within such period or submission of a properly executed Appeal Waiver form within such period shall constitute consent to the action taken by the Ethics Committee or Board of Trustees pursuant to such notice.

A Registered Technologist or Candidate may waive the 30-day timeframe to request an appeal. To request a waiver of the 30-day timeframe, the Registered Technologist or Candidate must complete an Appeal Waiver form that is available on the ARRT website at www.arrt.org.The Appeal Waiver form must be signed by the Registered Technologist or Candidate, notarized, and submitted to ARRT. The Chief Executive Officer of ARRT shall have the authority to receive, administer, and grant the Appeal Waiver form and may be assisted by staff members and/or legal counsel of ARRT. Any sanction proposed by the Ethics Committee would become effective on the date the appeal waiver is processed.

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

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

4. Range of Actions

(a) No Action

A determination of no action means that there is little or no evidence to substantiate that a violation even occurred. In a situation lacking even a preponderance of evidence, the complaint is determined to be unsubstantiated.

(b) Clear

A determination that there was a violation of the Rules of Ethics but that no further action will be taken against a person's eligibility for certification and registration or for continued certification and registration. The determination of cleared/eligible can be made administratively by staff, by the Chair, or by the Committee depending on the nature of the violation and existing policies addressing authority for taking action. After a violation has been cleared, the applicant or registrant will not be required to report the violation in the future.

(c) Private Reprimands

A private reprimand is a reprimand that is between the individual and ARRT and is not reported to the public. Private reprimands allow for continued certification and registration.

(d) Public Reprimands

A public reprimand is a sanction that is published on ARRT's website for a period of one year. Public reprimands allow for continued certification and registration.

(e) Conditional

Conditional status may be assigned administratively to Candidates and/or R.T.s in those cases where there are additional requirements that need to be met before the ethics file can be closed (e.g., conditions mandated by the court, regulatory authority and/or Ethics Committee). Conditional status is an administrative action and is not considered adverse.

(f) Suspensions

Suspension is the temporary removal of an individual's certification and registration in all categories for up to one year.

(g) Summary Suspensions

Summary suspension is an immediate suspension of an individual's certification and registration in all categories. If an alleged violation of the Rules of Ethics involves the occurrence, with respect to a Registered Technologist, of an event described in the Rules of Ethics, or any other event that the Ethics Committee determines would, if true, potentially pose harm to the health, safety, or well-being of any patient or the public, then, notwithstanding anything apparently or expressly to the contrary contained in these Administrative Procedures, the Ethics Committee may, without prior notice to the Registered Technologist and without a prior hearing, summarily suspend the certification and registration of the individual pending a final determination under these Administrative Procedures with respect to whether the alleged violation of the Rules of Ethics in fact occurred. Within five working days after the Ethics Committee summarily suspends the certification and registration of an individual in accordance with this provision, the Ethics Committee shall, by expedited delivery or certified mail, return receipt requested, give to the individual written notice that describes: (1) the summary suspension; (2) the reason or reasons for it; and (3) the right of the individual to request a hearing with respect to the summary suspension by written notice to the Ethics Committee, which written notice must be received by the Ethics Committee not later than 15 days after the date of the written notice of summary suspension by the Ethics Committee to the individual. If the individual requests a hearing in a timely manner with respect to the summary suspension, the hearing shall be held before the Ethics Committee or a panel comprised of no fewer than two members of the Ethics Committee as promptly as practicable, but in any event within 30 days after the Ethics Committee's receipt of the individual's request for the hearing, unless both the individual and the Ethics Committee agree to a postponement beyond the 30-day period. The Ethics Committee has the absolute discretion to deny any request for a postponement and to proceed to a hearing with or without the participation of the individual. The applicable provisions of Section 2 (Hearings) of these Administrative Procedures shall govern all hearings with respect to summary suspensions, except that neither a determination of the Ethics Committee, in the absence of a timely

request for a hearing by the affected individual, nor a determination by the Ethics Committee or a panel, following a timely requested hearing, is appealable to the Board of Trustees.

(h) Ineligible

An individual may be determined ineligible to obtain or renew certification and registration or ineligible for reinstatement of certification and registration. The time frame may be time limited or permanent.

(i) Revocation

Revocation removes the individual's certification and registration in all categories. The time frame may be time limited or permanent.

(j) Alternative Dispositions

An Alternative Disposition ("AD") is a contract between an individual and the ARRT (as represented by the Ethics Committee) that allows for continued certification and registration in lieu of revocation, provided the individual performs certain requirements, including, but not limited to, providing documentation, attending counseling and/or submitting to random drug and/or alcohol screening. A Registered Technologist or Candidate who voluntarily enters into an Alternative Disposition Agreement agrees to waive all rights set forth in these Administrative Procedures.

(k) Deny Removal of a Sanction

After a predetermined time, an individual may request removal of a sanction that had been previously imposed by the Committee. Sufficient compelling evidence must be provided to convince the Committee the sanction should be removed or modified. If evidence is not provided, the Committee may deny removal of the sanction. Situations that may result in denial of a sanction removal request include: additional violations of the Rules of Ethics after the sanction was imposed, failure to demonstrate that there has been adequate rehabilitation, and/or continued denial of responsibility.

(l) Civil or Criminal Penalties

Conduct that violates ARRT's Rules of Ethics may also violate applicable state or federal law. In addition to the potential sanctions under the *Standards of Ethics*, ARRT may, without giving prior notice, pursue civil and/or criminal penalties.

5. Publication of Adverse Decisions

Summary suspensions and final decisions (other than private reprimands and Alternative Dispositions) that are adverse to a Registered Technologist or Candidate will be communicated to the appropriate authorities of certification organizations and state licensing agencies and provided in response to written inquiries into an individual's certification and registration status. The ARRT shall also have the right to publish any final adverse decisions and summary suspensions and the reasons therefore. For purposes of this paragraph, a "final decision" means and includes: a determination of the Ethics Committee relating to an adverse decision if the affected individual did not request a hearing in a timely manner; a non-appealable decision of the Ethics Committee; an appealable decision of the Ethics Committee from which no timely appeal is taken; and, the decision of the Board of Trustees in a case involving an appeal of an appealable decision of the Ethics Committee.

6. Procedure to Request Removal of a Sanction

A sanction imposed by ARRT, including a sanction specified in a Settlement Agreement, specifically provides a sanction time frame and it shall be presumed that a sanction may only be reconsidered after the time frame has elapsed. At any point after a sanction first becomes eligible for reconsideration, the individual may submit a written request ("Request") to ARRT asking the Ethics Committee to remove the sanction. The Request must be accompanied by a nonrefundable fee in an amount to be determined by ARRT. A Request that is not accompanied by the fee will be returned to the individual and will not be considered. In rare cases, the fee may be waived, in whole or in part, at the sole discretion of ARRT. The individual is not entitled to make a personal appearance before the Ethics Committee in connection with a Request to remove a sanction or to modify a Settlement Agreement.

Although there is no required format, Requests for both sanction removal and Settlement Agreement modification must include compelling reasons justifying the removal of the sanction or modification of the Settlement Agreement. It is recommended that the individual demonstrate at least the following: (1) an understanding of the reasons for the sanction; (2) an understanding of why the action

leading to the sanction was felt to warrant the sanction imposed; and (3) detailed information demonstrating that the individual's behavior has improved and similar activities will not be repeated. Letters of recommendation from individuals, who are knowledgeable about the person's sanction imposed; and current character and behavior, including efforts at rehabilitation, are advised. If a letter of recommendation is not on original letterhead or is not duly notarized, the Ethics Committee shall have the discretion to ignore that letter of recommendation.

Removal of the sanction is a prerequisite to apply for certification and registration. If, at the sole discretion of the Ethics Committee, the sanction is removed, the individual will be allowed to pursue certification and registration via the policies and procedures in place at that time as stated in Section 6.05 of the *ARRT Rules and Regulations*.

If the Ethics Committee denies a Request for removal of the sanction or modification of a Settlement Agreement, the decision is not subject to a hearing or to an appeal, and the Committee will not reconsider removal of the sanction or modification of the Settlement Agreement for as long as is directed by the Committee.

7. Amendments to the Standards of Ethics

The ARRT reserves the right to amend the *Standards of Ethics* following the procedures under Article XII, Section 12.02 of the *ARRT Rules and Regulations*.

Appendix C

RADIATION PROTECTION PRACTICES

1. A student is required to exercise sound radiation protection practices at all times. At no time may a student participate in a procedure utilizing unsafe protection practices.

2. A student must be aware of and enforce the policies and procedures of radiation safety in keeping with institutional, state, and national standards.

- Students will always wear the radiation dosimeter while at clinical sites, store it properly in a radiation-free area when not working, and return it on time following each wear period.

- Students will wear the radiation dosimeter outside clothing, in the upper body area (neck/chest), with the label facing the source of radiation, and never covered by a lead apron. A ring badge will be worn when handling radioactive material.
- Students may not wear their radiation dosimeter while receiving personal x-ray exams like chest or dental x-rays.

6. A student who deliberately exposes his/her radiation dosimeter will be suspended and/or dismissed from the program.

7. A student will use appropriate shielding.

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

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

10. As students progress in the program, they must become increasingly proficient in the application of radiation safety practices.

11. Radiation protection of the patient and others within the examination room is the student's responsibility when the student is performing the study.

12. Students may not perform procedures involving ionizing radiation on other students or staff at their request or for demonstration purposes without a written order for the specific exam and for a specific patient by a physician. Likewise, students may not be the subject of an exam involving radiation unless a written order from the student's physician is in place. * The student will be dismissed from the program for this violation.

*(PA Code, Title 25. Environmental Protection. Department of Environmental Protection, Chapter 221.11)

Status **Active** PolicyStat ID **15778815**

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Next Review	05/2025

Owner	Danielle Rainey
Area	Radiology
Applicability	Jefferson University Hospital

Personnel Radiation Monitoring Program 5.07J Radiation Safety Policy #RSO-053

SCOPE:

Personnel radiation monitoring is applicable to individuals at Thomas Jefferson University (TJU) and Thomas Jefferson University Hospitals (TJUH) including physicians, technical staff, students, and contractors whose assigned job duties may involve exposure to ionizing radiation. This policy applies to all sources of ionizing radiation including radioactive materials (RAM), x-ray-producing devices, and medical and industrial accelerators and irradiators.

PURPOSE:

1. To monitor and quantify radiation dose to individuals whose job duties require them to work with or around ionizing radiation sources.
2. To ensure that occupational radiation exposure is maintained within annual dose limits and consistent with established ALARA (As Low As Reasonably Achievable) levels.
3. To comply with applicable Federal (NRC) and Pennsylvania DEP regulations and the terms and conditions of the Jefferson radioactive materials license and medical accelerator licenses. [Note: Pennsylvania incorporates NRC regulations by reference.]

POLICY:

Personnel radiation monitoring devices (also known as dosimeters or radiation badges) are individual monitoring devices as defined in 10 CFR 20.1203. They are issued to individuals who meet certain badging criteria for the purpose of assessing occupational radiation dose.

Dosimeters shall be issued to any worker whose assigned job duties involve potential exposure to ionizing radiation and after the Radiation Safety Officer (RSO) has determined that the established

regulatory or institutional badging criteria has been met.

Dosimetry reports shall be routinely reviewed by the RSO or designated Health Physicist at a frequency of no less than quarterly. Data shall be provided to department managers promptly following receipt, to be made available to individual workers.

TJU and TJUH Management, the Radiation Safety Committee (RSC), and the Radiation Safety Officer (RSO) are committed to supporting and enforcing the personnel monitoring program.

Definitions:

Dose Equivalent: An absorbed radiation dose quantity, modified by a radiation weighting factor that depends on the type of ionizing radiation, or by tissue/organ weighting factors, as appropriate.

Deep Dose Equivalent (DDE): The dose equivalent (tissue dose from external radiation sources) as measured at a depth of 1.0 cm below the skin surface.

Effective Dose Equivalent (EDE): The DDE as measured by a radiation dosimeter, adjusted where appropriate by mathematical formulas (such as Webster) to take into account the protection factor obtained from use of protective lead garments when working in a fluoroscopy environment.

Extremity Dose: The dose equivalent to the hand or forearm (below the elbow), or to the feet or lower leg (below the knee) determined at a tissue depth of 0.007 cm, as measured by a dosimeter such as a ring, wrist, or other badge configuration worn on an extremity. Extremity dose may be described using the term shallow dose equivalent (SDE).

Lens Dose Equivalent (LDE): The dose equivalent determined at a tissue depth of 0.3 cm, which is the depth below the eye surface where the lens is situated, as derived by a radiation dosimeter.

Millirem (mrem): The unit of measure for any "dose equivalent" term.

Radiation dosimeter: A small passive or active device worn by an individual for the assessment of occupational radiation dose. Device types include optically stimulated luminescent (OSL) dosimeters, thermo-luminescent dosimeters (TLDs), electronic dosimeters such as Instadose, and pocket ionization chambers for example.

Shallow ("Skin") Dose Equivalent (SDE): The dose equivalent determined at a tissue depth of 0.007 cm, as measured by a radiation dosimeter.

High Radiation Area: An area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 0.1 rem (1 mSv) in 1 hour at 30 cm from the radiation source or 30 cm from any surface that the radiation penetrates.

Very High Radiation Area: An area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose in excess of 500 rad (5 gray in 1 hour at 1 m from a radiation source or 1 m from any surface that the radiation penetrates.

Declared pregnant worker (DPW): A female badged radiation worker who has a confirmed pregnancy and has voluntarily made the pregnancy known to her supervisor and/or to the RSO in writing with the estimated date of conception, and who has completed and signed a “Pregnancy Declaration Form”.

Procedures:

Badge Issue Guidelines:

Issuing dosimeters is required by regulation for personnel who are likely to exceed 10% of the occupational dose limits in 10CFR20.1502, from radiation sources external to the body as defined below:

A. Adult workers (≥ 18 years of age):

Badges are required to be issued if likely to exceed any of the following, per 10 CFR 20.1201:

1. ≥ 500 mrem whole body exposure (DDE)
2. ≥ 1500 mrem lens exposure (LDE)
3. ≥ 5000 mrem shallow skin dose (SDE) to forearm, hands, legs, lower leg

B. Minors (≤ 18 years of age):

Badges are required to be issued if likely to exceed any of the following, per 10 CFR 20.1201:

1. 100 mrem whole body exposure (DDE)
2. 150 mrem lens exposure (LDE)
3. 500 mrem shallow skin dose (SDE) to forearm, hands, legs, lower leg

C. Declared Pregnant Worker (DPW):

Fetal badges are required to be issued if likely to exceed 100 mrem to the embryo/fetus throughout the duration of the pregnancy.

Workers who are wearing a monthly dosimeter at the time of declaration and who do not routinely wear lead aprons do not require an additional fetal badge. The worker should be advised to wear their whole-body dosimeter at abdominal level for the duration of pregnancy.

Workers who are wearing a monthly dosimeter at the time of declaration and routinely wear lead aprons are to be issued a fetal badge, to be worn at abdominal level under the lead apron for the duration of pregnancy.

Workers who are wearing a quarterly dosimeter at the time of declaration may be issued a fetal badge to be exchanged monthly or quarterly at the discretion of the RSO.

A list of DPW’s is to be maintained and tracked by Radiation Safety. All fetal badges shall be

promptly discontinued at 9 months, when notified of delivery, or when notified in writing by the DPW that the declaration is retracted for any reason.

A. Individuals entering a high or a very high radiation area are required to be badged.

B. For risk management purposes, the RSO may require dosimeters to be worn by individuals who, while not meeting any of the above criteria under normal circumstances, have a higher potential of risk to exceed the limits should an abnormal event occur. Examples of such groups include:

1. Radiation Therapists and Radiation Oncology physicists
2. Personnel directly involved in administering therapeutic radiation.
3. Engineering or others who operate radiation producing equipment for the purposes of warm-up, testing, calibration, and/or repair of the radiation producing equipment.
4. Nurses engaged in the direct care of patients undergoing brachytherapy with non-permanent implants or of patients otherwise required to be hospitalized as per the provisions of 10 CFR 35.75.
5. Any individual who routinely operates fluoroscopic equipment.
6. Individuals under the age of eighteen (18) with potential exposure to radiation.

C. Research Radioisotope Handlers:

1. Beta-emitters with maximum energy > 0.5 MeV in amounts ≥ 10 mCi at any one time.
2. Photon-emitters with gamma ray constants ≥ 1 R-cm^2/hr-mCi in amounts > 1.0 mCi.
3. Photon-emitters with gamma ray constants < 1 R-cm^2/hr-mCi in amounts > 10.0 mCi
4. Rings to be added under the following circumstances:
    a. Beta-emitters with maximum energy > 0.5 MeV in amounts ≥ 1.0 mCi at any one time.
    b. Beta-emitters with maximum energy between 0.02 - 0.5 MeV in amounts ≥ 100.0 mCi at any one time.
    c. Photon-emitters with gamma ray constants > 1 R-cm^2/hr-mCi in amounts > 1.0 mCi at any one time.
    d. Photon-emitters with gamma ray constants < 1 R-cm^2/hr-mCi in amounts > 10.0 mCi at any one time.
    e. Working with or near radiation-producing devices with the potential for primary beam exposure to the hands.

5. Other situations where dosimeters may be issued include situations of short-term need for visitors, guests, or inspectors who have a business or educational need to be escorted through radiation areas. Non-human use needs include the use of area monitors, with short-term placement of dosimeters in specific locations to assess potential radiation levels of concern. Area monitors are generally issued as monthly exchange and used for 3-6 wear cycles.

6. Spare badges are maintained for short term use to replace lost badges or for new workers pending receipt of a new order.
7. Control badges accompany each new shipment of dosimeters with the intent of tracking radiation exposure during the transportation process to and from the badge vendor to Jefferson and must be included when dosimeters are returned for processing. Control badges must be continuously stored in a radiation-free area within the Radiation Safety Office upon receipt and until return to the badge supplier.

Radiation Worker Responsibilities:

A. Always wearing the dosimeter while working in radiation areas as a condition of employment.
B. Never placing the dosimeter under a lead apron or dangling from a lanyard. Wear at the neck/ collar/chest area with the label facing the radiation source.
C. Promptly exchanging dosimeters at the end of a wear period (calendar month or quarter).
D. Returning all used dosimeters to the Radiation Safety Office within 1 week of exchange.
E. Returning all dosimeters upon terminating employment with Jefferson.
F. Taking proper care of the dosimeters to avoid damage, loss, or contamination.
G. Storing the badge in a designated radiation-free area at work when not being worn.
H. Not wearing dosimeters when receiving personal medical exams involving radiation.
I. Notifying Radiation Safety immediately if the badge is lost or damaged, if a name change occurs, if the worker changes jobs, or if the badge was left in a radiation area.
J. Not intentionally exposing your badge or other badges to radiation.
K. Following all radiation safety guidelines for proper use and return of badges.
L. Reviewing dosimetry data regularly and contacting Radiation Safety if data is not available.

Dosimetry Report Review:

A. Dosimetry reports shall be reviewed by the RSO or designated Health Physicist promptly following receipt and no less frequent than quarterly. The review shall include assessing for unusually high readings, exceeding ALARA levels, unreturned badges, error messages, and results inconsistent with benchmark values for the job being performed. Proper assignment of EDE (Webster formula) shall be completed, and attention given to any evidence of badge vendor error. Overall compliance with all annual dose limits shall be determined.
B. Fetal badge data for declared pregnant workers (DPW) shall be specifically reviewed for compliance with the 500 mrem gestational limit and a uniform monthly delivery of ≤ 50 mrem.
C. Any unusual findings, observations of concern, and ALARA triggers shall be promptly investigated when warranted. ALARA findings shall be documented quarterly on a report designed for that purpose and shared with the Radiation Safety Committee.
D. Return rates shall be assessed and documented for compliance with internal standards:
    1. a. 90-100% has been established as the optimal return rate.

b. 80-89% return rate has been established as “needing improvement”.

c. < 80% has been established as “deficient” and requires follow up.

E. Dosimetry reports shall be promptly issued to the applicable department managers by Radiation Safety with confirmation that a method is in place for individual workers to observe the report. In the case of fetal badge data, the RSO shall support the confidentiality needs of the DPW.

F. Radiation Safety shall ensure that all badged workers understand how to obtain their data, how to read and interpret the dosimetry report, and know that dosimetry data can be obtained at any time from the Radiation Safety Office.

G. Annual Form 5’s, which are cumulative reports of radiation exposure to an individual, shall be provided to each worker whose annual CY dose exceeds 100 mrem or if they request one.

H. Dosimetry reports shall be maintained for the life of the Jefferson licenses and registrations.

I. Dosimetry reports shall be maintained securely in the Radiation Safety Office and organized in chronological order and by department as auditable legal documents. No personal-protected information (PPI) shall be present on the report, such as birthdates and social security numbers.

ALARA Review and Investigation:

ALARA Investigation Levels I and II have been established by the RSO at 5% and 10% of the annual dose limits respectively and were approved by the Radiation Safety Committee. Quarterly ALARA levels are defined as follows:

ALARA Investigation Level I (5% of applicable annual dose limit):

DDE (whole body) = 250 mrem

LDE: (lens of eye) = 750 mrem

SDE: (extremity dose): = 2500 mrem

ALARA Investigation Level II (10% of applicable annual dose limit):

DDE (whole body) = 500 mrem

LDE: (lens of eye) = 1500 mrem

SDE: (extremity dose): = 5000 mrem

The Radiation Safety Office shall investigate any ALARA finding that exceeds Level II directly with the affected worker when the finding cannot be definitively justified. ALARA Level I findings are tracked and investigated as determined necessary by the RSO.

When dosimetry readings are definitively found to be due to non-occupational radiation exposure of the badge, the dose of record may be adjusted by the RSO upon written request to the badge vendor. Examples of situations that may warrant this action include the badge being accidentally left in a radiation area and exposed without being worn, a badge that was exposed

while the worker was receiving a personal x-ray or Nuclear Medicine exam, or a badge that was accidentally left in a checked bag at an airport.

All ALARA findings shall be documented for review by the Radiation Safety Committee at its quarterly meetings.

References:

- 10 CFR 20.1003 (definitions) and 10 CFR 20.1201; 20.1207; 20.1208 and 10 CFR 20.1502
- 10 CFR 19.13
- NUREG 1556 Volume 9 Rev 3 Appendix M

Maintained By:	Catherine Anderko, RSO
Policy Notes:	
Revision Notes:	5/1/24
Attachments:	

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	05/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

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Owner	Danielle Rainey
Area	Radiology
Applicability	Jefferson University Hospital

ALARA Program 5.04J Radiation Safety Policy #RSO-055

SCOPE

ALARA policies and procedures are applicable to all radiation workers at Thomas Jefferson University (TJU) and Thomas Jefferson University Hospitals (TJUH) including physicians, technical staff, students, and contractors whose assigned job duties may involve exposure to ionizing radiation. This policy applies to all sources of ionizing radiation including radioactive materials (RAM), x-ray-producing devices, and medical and industrial accelerators and irradiators.

PURPOSE

1. To maintain occupational radiation dose to a level that is as low as reasonably achievable (ALARA) considering social and economic factors. The ALARA philosophy applies to individual and collective doses of radiation.
2. To comply with pertinent Federal (NRC), Pennsylvania DEP regulations, and terms and conditions of the Jefferson radioactive materials license and medical accelerator licenses. [Note: Pennsylvania incorporates NRC regulations by reference.]

POLICY

An ALARA program has been established that provides procedures, guidelines, and trigger levels intended to ensure that worker radiation dose is as low as possible consistent with the standard of care and aligned with standard operating procedures to accomplish job duties.

Regulations allow workers to receive occupation radiation dose up to established annual dose limits for the whole body, extremity, and the lens of the eye. Because the linear non-threshold model of dose-response is conservatively applied in radiation safety and assumes any dose, however small, has an associated risk, an attempt is made to minimize radiation exposure to only that

necessary to perform required job duties. ALARA means making every reasonable effort to maintain individual worker dose as far below the dose limits as is practical, consistent with standards of operational practice, the state of technology, and socioeconomic considerations. To achieve this goal, operating procedures, administrative controls, and engineering controls shall be used for dose reduction when warranted.

ALARA tolerance levels shall be established to identify levels of occupational exposure that warrant investigation. ALARA levels shall be set far below the annual dose limits, in an attempt to avoid approaching the dose limits, and to alert workers to reevaluate work practices and conditions.

TJU and TJUH Management, the Radiation Safety Committee (RSC), and the Radiation Safety Officer (RSO) are committed to supporting the ALARA concept.

Procedures:

1. Radiation Safety Office staff are available at any time to assist radiation workers in developing safe practices and controls that support the ALARA philosophy.
2. Workers are encouraged to contact the Radiation Safety Office if they feel ALARA principles are not being followed or need improvement, or if unsafe practices are observed. TJU supports a strong safety culture to encourage workers to come forward without any fear of retaliation.
3. Radiation Permit Holders, Authorized Users (AU), and department managers are responsible for ensuring that supervised radiation workers are trained and educated in good radiation safety practices, including ALARA principles. In order to use radiation sources, individuals must be qualified and have proven established competency.
4. Quarterly ALARA Level I and II tolerances are established, which are set at 5% and 10% of the annual dose limits respectively, and apply to radiation exposure of the whole body, extremity, and lens of the eye. ALARA Level I findings are tracked by Radiation Safety staff and may be investigated when unable to be justified. ALARA Level II findings are usually investigated with the affected worker unless able to be justified.
5. ALARA findings are reviewed quarterly with the Radiation Safety Committee (RSC) at quarterly meetings and are summarized in the Annual Audit of the Radiation Safety Program-Report to Executive Management.
6. Each individual who handles radioactive material (RAM) or operates radiation-producing equipment has specific responsibilities as follows:

   a. Be familiar with safe handling/operating procedures, good radiation work habits, and the principles of radiation protection.
   b. Know the specific procedures for handling, storing, and disposing of radiation sources. Careful planning, such as trial runs, should be employed for new uses.
   c. Use ALARA concepts consistently in relation to work procedures.

References:

- 10 CFR Part 20.1003; 20.1101(b)
- NUREG 1556 Volume 9 Rev 3 Appenix M

Maintained By:	Catherine Anderko, RSO

Policy Notes:	
Revision Notes:	5/1/24
Attachments:	

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	05/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

Status Active PolicyStat ID 15792714

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Next Review	05/2025
Owner	Danielle Rainey
Area	Radiology
Applicability	Jefferson University Hospital

Pregnancy Policy for Radiation Workers 5.08J Radiation Safety Policy #RSO-050

SCOPE:

The "Pregnancy Policy for Workers" is applicable to individuals at Thomas Jefferson University (TJU) and Thomas Jefferson University Hospitals (TJUH) including physicians, technical staff, students, and contractors whose assigned job duties may involve exposure to ionizing radiation and who are assigned radiation dosimeters for tracking occupational radiation exposure. This policy applies to all sources of ionizing radiation including radioactive materials (RAM), x-ray-producing devices, and medical and industrial accelerators and irradiators.

PURPOSE:

1. To minimize radiation dose to the embryo/fetus of a declared pregnant radiation worker from occupational radiation exposure of the worker.
2. To comply with applicable Federal and State regulations that govern radiation exposure to the embryo/fetus and management of pregnant radiation workers. The State of PA DEP incorporates Nuclear Regulatory Commission (NRC) regulations by reference.
3. To conform with NRC Regulatory Guide 8.13, Rev. 3 (June 1999) entitled "Instruction Concerning Prenatal Radiation Exposure".

POLICY:

Radiation workers (as defined below) who become pregnant have the right to voluntarily "declare" their pregnancy in accordance with this policy, which is based on 10 CFR 20.1003. It is the policy of Thomas Jefferson University and Hospital to:

a. Advise pregnant radiation workers about the health effects of ionizing radiation to the embryo/

fetus, as required by 10 CFR 19.12.

b. Establish procedures to ensure that the dose limits to the embryo/fetus of the declared pregnant worker (DPW) are within the limits specified in 10 CFR 20.1208.

c. Provide instructions to the pregnant radiation worker on methods to maintain radiation dose ALARA (As Low As Reasonably Achievable) as required by 10 CFR 20.1101(b).

Definitions:

1. Declared Pregnant Worker (DPW): A radiation worker of the TJU/TJUH enterprise who has voluntarily informed the Radiation Safety Officer (RSO), in writing, of her pregnancy and the estimated date of conception (month and year). The declaration remains in effect until either the DPW voluntarily withdraws the declaration in writing or is no longer pregnant.
2. Declaration of Pregnancy: A voluntary written notice prepared by a pregnant radiation worker informing the RSO of a confirmed pregnancy, with the estimated date of conception, on a form designed for that purpose.
3. Radiation Worker: An employee, contractor, or student of the TJU/TJUH enterprise whose job duties may expose them to ionizing radiation from radiation-producing machines or radioactive materials and may be monitored for occupational radiation exposure.

Procedures:

1. Instructions on the health effects of ionizing radiation during pregnancy as well as methods to reduce radiation exposure during pregnancy shall be incorporated into function-specific radiation safety training programs provided to radiation workers.
2. The "Declaration of Pregnancy Form for Radiation Workers" will be issued to any radiation worker requesting one for the purpose of voluntarily declaring pregnancy. The form shall include the individual's name, attestation of a confirmed pregnancy, the estimated month and year of conception, and the declaration date. Once returned to the RSO, the following will occur:
   a) The worker is entered into the DPW database.
   b) The worker becomes subject to the dose limits in 10 CFR 20.1208.
   c) Dosimeters to be returned monthly for analysis (or quarterly, as approved by the RSO).
   d) The conditions of the "Pregnancy Policy for Radiation Workers" shall be followed.
   e) NRC Reg Guide 8.13 will be issued to the DPW.
3. The DPW may withdraw her declaration of pregnancy at any time and for any reason by providing a written statement to the RSO. Worker status will revert to that in effect prior to the initial declaration without discrimination or repercussion with respect to job status or work environment. The worker may choose to re-declare at any time and for any reason.
4. TJU/TJUH will take the steps necessary to ensure that the embryo/fetus dose limits specified in 10 CFR 20.1208 are not exceeded (500 millirem for the duration of the pregnancy and 50 millirem per month optimally to allow exposure uniformity over the gestation).
   a) In most cases, no change in job assignments are necessary, however, workers may be reassigned to other areas or duties involving lower exposure potential or have some tasks

involving radiation exposure reduced in frequency, at the judgement of the RSO and Manager of the area.
b) The limits specified apply only to occupational exposure. Radiation exposure from medical procedures and natural background radiation are not included.

5. The RSO or designated Health Physicist will offer counseling to radiation workers who are considering declaration to answer questions and provide guidance on making the decision to declare. Additional counseling on dose reduction techniques based on the specific work environment of the worker will be offered, including a review of dosimetry results, whether the worker has decided to declare or not.
6. The Radiation Safety Office may issue a second dosimeter (fetal monitor) when warranted. In some cases, existing whole body radiation dosimeters may be sufficient for tracking fetal dose, however, the DPW will be instructed to wear the dosimeter at the anterior abdominal level and exchange monthly.
7. Information related to worker pregnancy will be held as confidential, with information shared only on a "need to know" basis (e.g., with the individual's supervisor) as may be necessary to ensure compliance with the radiation dose limits and other regulatory requirements.

References:

1. Title 10, Code of Federal Regulations; Parts 19 and 20.
2. NRC Reg Guide 8.13, Rev.3 (June 1999), "Instruction Concerning Prenatal Radiation Exposure".
3. NRC Reg Guide 8.29, Rev.1 (Feb 1996), "Instruction Concerning Risk from Occupational Exposure".
4. NCRP Report #174 "Preconception and Prenatal Radiation Exposure - Health Effects and Protective Guidance" 2013.
5. TJU Radiation Safety Manual for Radioisotope Use in Research Labs, 5/1/24.
6. TJUH "Clinical Radioactive Materials Procedure Manual", July 7, 2021.
7. TJUH "Radiation Safety Guide for Nurses who Care for Radiation Patients", 1/4/24.

[Copies of the above references may be obtained by contacting the Office of Radiation Safety, 215-955-7813.]

Please see the attached Form Letter for Declaring Pregnancy

Maintained By:	Catherine Anderko, RSO
Policy Notes:	
Revision Notes:	5/1/24
Attachments:	

Attachments

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Form Letter for Declaring Pregnancy

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	05/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

Status **Active** PolicyStat ID **15589266**

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Owner	Danielle Rainey
Area	Radiology
Applicability	Jefferson University Hospital

Protection of Pregnant or Potentially Pregnant Patients from X-Rays - Radiation Safety, 5.06 J

PURPOSE

To minimize ionizing radiation dose to the embryo/fetus of any patient undergoing imaging that involves the use of x-ray radiation sources. .

POLICY

Given that exposure of the developing embryo/fetus to ionizing radiation may pose an increased potential pre- and/or post-natal health risk, radiation exposure involving pregnant patients is to be avoided unless the medical benefits of the procedure outweigh the risks. Considering also that "the medical welfare of both the expectant mother and her unborn child may be jeopardized if the indicated radiological examinations are not carried out" (Reference 1), x-ray examinations of pregnant patients may be necessary. Such medically necessary procedures are to be carried out in a manner that optimizes radiation dose to the patient and keeps radiation dose to the embryo-fetus as low as reasonably achievable (ALARA).

Definitions:

For the purposes of this Policy and related procedures, the following terms are defined.

"Optimize (optimization)" means utilizing the lowest patient radiation dose necessary to produce images of acceptable clinical quality as required for the study at hand.

Procedures:

Pre-Imaging

1. The pregnancy status of any potentially pregnant woman is to be determined by means appropriate for the clinical area performing the imaging and the type of study being performed (e.g., patient questioning, clinical history). Pregnancy testing should be considered for procedures that could result in high radiation doses to the abdominal area.
2. Only medically necessary procedures should be performed. Elective procedures involving the potential for direct exposure of the embryo-fetus to the primary x-ray beam (i.e., imaging of the pelvic or abdominal area) are to be cancelled or delayed until after the woman is no longer pregnant.
3. Decisions on whether to perform a given procedure involving exposure to x-rays rests with the referring physician, in consultation with the imaging or therapy physician (e.g., Radiologist, Cardiologist, Neurologist, Radiation Oncologist, etc.) who will be conducting and/or supervising the imaging procedure.
4. Relevant potential risks are to be discussed with the patient or patient-guardian in advance of the procedure, unless the emergent medical condition of the patient is such that any resultant delay could lead to an adverse effect. [Personnel discussing such risks with the patient may consult with the Radiation Safety Officer (215-955-7813) for information on radiation risks.

Imaging Procedures for Maintaining Radiation Dose ALARA (Fluoroscopy)

1. The beam-on time is to be kept to the minimum necessary for the safe and efficacious completion of the procedure. Use of timesaving tools and practices (e.g., use of "last-image hold") are to be fully exploited.
2. X-ray beam size is to be minimized (limited to the area of anatomical interest).
3. Whenever possible, the fluoroscope is to be operated in those settings or modalities that deliver the lowest dose (e.g., "pulse" or low dose rate modes; low magnification). Minimize the use of cineradiography (image acquisition) to the extent possible, and use the lowest frame rate settings that deliver clinically acceptable images.
4. The radiation source to patient skin distance is to be maximized; the patient to image-receptor (i.e., image intensifier) is to be minimized.
5. Lead shielding for the embryo-fetus should be employed in cases where the embryo-fetus may be close to the primary x-ray beam. Shielding should not be employed in situations where the shield is expected to be in the primary beam, or if the shield in any way would interfere with necessary imaging. [Note that the presence of lead in the primary of a fluoroscope will drive the radiation dose output of the fluoroscope to high levels, increasing patient skin entrance and total dose. Placement of a shield close to the primary x-ray field is for the purpose of protecting the embryo/fetus if the primary beam inadvertently and /or momentarily passes over that location.] Shielding (e.g., lead aprons, etc.) is to be positioned between the x-ray source and the patient, but (again) not in the expected area of the primary x-ray field. Such lead shielding is to be 0.5 mm lead equivalent. [Note: Abdominal lead shielding for situations where the primary x-ray beam is entering the patient's anatomy at a point distant from the abdominal-pelvic area will be of little or no value, except where the geometry of the situation allows scattered x-rays (from the location where the primary beam enters the patient) to enter the patient's abdominal area from the outside of the patient's body.]

Imaging Procedures for Maintaining Radiation Dose ALARA (Radiography)

1. All appropriate precautions are to be followed to avoid the need for any re-takes.
2. X-ray beam size is to be minimized (limited to the area of anatomical interest).
3. Lead shielding for the embryo-fetus is to be employed in cases where the patient's pelvic-abdominal area may be in the primary x-ray beam (unless such shielding interferes with necessary imaging). Shielding (e.g., lead aprons, etc.) is to be positioned between the x-ray source and the patient. Such lead shielding should be 0.5 mm lead equivalent. [Note: Abdominal lead shielding for situations where the primary x-ray beam is entering the patient's anatomy at a point distant from the abdominal-pelvic area will be of little or no value, except where the geometry of the situation allows scattered x-rays (from the location where the primary beam enters the patient) to enter the patient's abdominal area from the outside of the patient's body.]

Embryo-Fetal Dose Evaluation

In cases where the primary beam may enter the pregnant patient in close proximity to the embryo-fetus, post procedure calculations may be necessary to evaluate the likely embryo-fetal radiation dose. [Note: Placement of radiation dosimeters on the patient during the procedure may not provide meaningful results and is generally not required. However, there may be occasions when use of dosimeters may have value in aiding with fetal dose calculations or in verifying the results of such calculations. This should be discussed in advance with the Radiation Safety Officer or a diagnostic radiology medical physicist. If appropriate, dosimeters may be obtained from the Radiation Safety Office, extension 215-955-7813.]

To arrive at accurate dose estimates, the following information should be collected if possible (more information allows for more accurate dose reconstruction):

Fluoroscopy:

1. X-ray entrance angle(s)
2. X-ray source to patient skin distance(s)
3. Patient thickness (distance x-ray beam travels through patient).
4. Anatomical location where primary beam enters patient
5. X-ray modality (e.g., "pulse", "low dose", "normal", "high dose") utilized.
   (Alternate to Nos. 3, 4, and 5 – record each combination of kVp and mA at which the unit is operated.)
6. Magnification setting(s) used
7. The amount of "beam-on" time for each of the above combinations (e.g., magnification setting and modality) used.
8. If the unit is so equipped, the integrated "dose area product " (DAP) or "kerma area product"

(KAP), and/or reference dose

9. The number of runs and the dose or length per run, if any image recording (e.g., cine, DSA) is performed

Radiography (non CT)

For each radiograph:

1. Source to patient skin distance.
2. Patient thickness (distance x-ray beam travels through patient).
3. Study type/description (e.g., "PA Chest")
4. Technique factors used (mAs*, kVp)
   (*Record mAs or mS after exposure for phototimed exposures)
5. Room or Unit used.

CT

1. Type of study (anatomy scanned, e.g., head, chest, chest-abdomen-pelvis, etc.
2. Technique factors, including type (helical or axial0, kV, mAs, collimation, axial scan increment or helical scan pitch, and whether dose modulation was used.
3. CT unit used
4. CTDI and DLP values

Attachment(s)

References and Citations:

1. NRCP Report No. 54 "Medical Radiation Exposure of Pregnant and Potentially Pregnant Women".
2. Summary of the Current ICRP Principles of Protection of the Patient in Diagnostic Radiology
3. https://rpop.iaea.org/RPOP/RPoP/Content/index.htm

[Copies of the above references may be obtained by contacting the Office of Radiation Safety, 215-955-7813.]

Maintained By:	Jennifer Rivera
Policy Notes:	
Revision Notes:	
Attachments:	

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	04/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

Status **Active** PolicyStat ID **15589254**

Origination	06/2001	Owner	Danielle Rainey
Last Approved	04/2024	Area	Radiology
Effective	04/2024	Applicability	Jefferson University Hospital
Last Revised	04/2024		
Next Review	04/2025		

Radiation Safety - Fluoroscopy, 5.02 J

FLUOROSCOPY

A. Students are not permitted to fluoroscope under any conditions.

B. Technologists must properly align the bucky to the AOI and may "tap" fluoro prior to Exposure for routine scout images in those situations where field localization technologies (e.g., light field localizers) cannot provide adequate alignment.

Maintained By:	Jennifer Rivera
Policy Notes:	
Revision Notes:	CC/MHD Merged 9/14/11
Attachments:	

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	04/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

Status **Active** PolicyStat ID **15589237**

Origination	06/2001
Last Approved	04/2024
Effective	04/2024
Last Revised	04/2024
Next Review	04/2025
Owner	Danielle Rainey
Area	Radiology
Applicability	Jefferson University Hospital

Radiation Safety - Radiation Protection, 5.01 J

Purpose:

This policy describes measures to be taken to comply with the fundamental radiation protection principle known as ALARA (As Low As Reasonably Achievable). Although the ALARA principle was originally intended to apply to radiation workers, this policy covers both workers and patients.

Radiation protection of patients:

Collimation should be used to the maximum extent possible to restrict the size of the radiation field to the anatomy of interest. If a body part that should not be included in an exam lies within the primary radiation field, then contact shields made of lead or other highly attenuating material should be used to protect that body part. In radiography, fluoroscopy, mammography, and CT, secondary radiation (leakage and scatter) is sufficiently low that protective shielding offers little benefit and is not required. However, in keeping with the ALARA principle, reasonable measures may be taken to cover radiosensitive organs (for example, thyroid, torso, abdomen, pelvic region) with contact shields, at the discretion of the radiologic technologist. Because of the large variety of examinations that are performed, it is impractical to specify the precise shielding to be used for each examination. Therefore, the radiologic technologist must use his/her professional judgment to determine when and where contact shield use is appropriate. Contact shields may reduce patient anxiety and improve cooperation; this may justify their use. However when contact shields are likely to interfere with the examination, for example thyroid collars in mammography, or pelvic shields in abdominal CT, then they should not be used.
The abdominal/pelvic region of pregnant patients should be protected using lead contact shields to the extent possible without compromising the diagnostic examination, in accordance with Policy 3.01.

Radiation Protection of Personnel:

Except for patients who cannot be moved out of the room, only staff and ancillary personnel may be in

the imaging room during a radiographic procedure. Personnel must be protected from stray radiation by 0.25 mm lead equivalent material, or 0.5 mm lead equivalent material for any body part struck by the useful beam.
If a human holder is required to provide support for a patient during an imaging procedure, then the staff member must be protected by 0.5 or 0.25 mm of lead, as described above. Mechanical support or immobilization devices should be used in lieu of a human holder whenever possible. An individual may not routinely hold image receptors or patients.

Radiology staff who have been assigned personal radiation monitoring devices by the Radiation Safety Office are to wear them at all times while in controlled areas. The monitors should be worn in accordance with instructions provided by the RSO. The monitors must be returned and replaced according to the designated schedule to allow proper assessment of individual occupational radiation dose.

Pregnant workers who declare their pregnancy in writing to the Radiation Safety Officer become subject to a lower occupational dose limit, in accordance with regulations and Radiation Safety Office policy.

Maintained By	Jennifer Rivera
Policy Notes:	
Revision Notes:	CC/MHD Merged 9/14/11
Attachments:	

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	04/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

Status Active PolicyStat ID 16367254

Origination	08/2015
Last Approved	08/2024
Effective	08/2024
Last Revised	08/2024
Next Review	08/2025
Owner	Danielle Rainey
Area	Radiology
Applicability	Jefferson University Hospital

Radiation Safety Emergency Contact, 5.09 J

RADIATION SAFETY OFFICE:

Nevil Bldg
919 Walnut Street, Suite 820
Philadelphia, PA.19107
Office: (215) 955-7813 or (215) 503-2875
Fax: (215) 923-9039

RADIATION SAFETY OFFICE STAFF:

Catherine Anderko, Radiation Safety Officer
Office: (215) 503-2875
Cell: (570) 204-2452

David Howard, Associate Radiation Safety Officer
Office: (215) 955-7813
Cell: (313) 919-8510

Ryan Siggins, Health Physicist
Office: (215) 503-3003
Cell: (678) 444-0799

Daniel A. Peck, Health Physicist Assistant
Office: (215)-503-3003
Cell: (770) 315-0137

Sharon J. Richardson,Health Physics Technician
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Margaret L. MacCallum, Health Physicist
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Cell: (404) 210-1938

Maintained By:	Catherine Anderko, RSO
Policy Notes:	
Revision Notes:	May 1, 2024
Attachments:	

Approval Signatures

Step Description	Approver	Date
Approver team	Isabella Rockey	08/2024

Applicability

Thomas Jefferson University Hospitals, Inc.

Appendix K

Standards for an Accredited Educational Program in Radiography

Effective January 1, 2021

Adopted April 2020

Introductory Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) **Standards for an Accredited Educational Program in Radiography** are designed to promote academic excellence, patient safety, and quality healthcare. The **Standards** require a program to articulate its purposes; to demonstrate that it has adequate human, physical, and financial resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing these purposes; and to provide assurance that it can continue to meet accreditation standards.

The JRCERT is recognized by both the United States Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA). The JRCERT **Standards** incorporate many of the regulations required by the USDE for accrediting organizations to assure the quality of education offered by higher education programs. Accountability for performance and transparency are also reflected in the **Standards** as they are key factors for CHEA recognition.

The JRCERT accreditation process offers a means of providing assurance to the public that a program meets specific quality standards. The process not only helps to maintain program quality but stimulates program improvement through outcomes assessment.

There are six (6) standards. Each standard is titled and includes a narrative statement supported by specific objectives. Each objective, in turn, includes the following clarifying elements:

- **Explanation** - provides clarification on the intent and key details of the objective.
- **Required Program Response** - requires the program to provide a brief narrative and/or documentation that demonstrates compliance with the objective.
- **Possible Site Visitor Evaluation Methods** - identifies additional materials that may be examined and personnel who may be interviewed by the site visitors at the time of the on-site evaluation in determining compliance with the particular objective. Review of supplemental materials and/or interviews is at the discretion of the site visit team.

Regarding each standard, the program must:

- Identify strengths related to each standard
- Identify opportunities for improvement related to each standard
- Describe the program's plan for addressing each opportunity for improvement
- Describe any progress already achieved in addressing each opportunity for improvement
- Provide any additional comments in relation to each standard

The self-study report, as well as the results of the on-site evaluation conducted by the site visit team, will determine the program's compliance with the Standards by the JRCERT Board of Directors.

Standards for an Accredited Educational Program in Radiography

https://www.jrcert.org/sites/jrcert2/uploads/documents/2021_Standards/2021_Standards_Radiography_02_18_21.pdf

Table of Contents

Appendix L

RADIOGRAPHY SCOPE OF PRACTICE & PRACTICE STANDARDS

The ASRT Practice Standards for Medical Imaging and Radiation Therapy define the practice and establish general and specific criteria to determine compliance. The document includes a number of professional practice resources and can be found at https://www.asrt.org/main/standards-and-regulations/professional-practice/practice-standards

Practice standards are authoritative statements established by the profession for judging the quality of practice, service and education. Professional practice constantly changes as a result of a number of factors including technological advances, market and economic forces, and statutory and regulatory mandates.

Scopes of practice delineate the parameters of practice, identify the boundaries for practice and typically are formatted as lists of tasks that are appropriate to include as part of the work of an individual who is educationally prepared and clinically competent for that profession.

Each scope of practice is limited to that which the law allows for specific education, experience and demonstrated competency. Many states have laws, licensing bodies and regulations that describe requirements for education and training and define scopes of practice for professions.

Advisory opinion statements are interpretations of the practice standards. They are intended for clarification and guidance for specific practice issues.

Appendix M

Position Statement on Breast Imaging Clinical Rotations

Adopted by the JRCERT Board of Directors (October 2021)

The JRCERT Board of Directors has received numerous inquiries to update and generalize the language in the Position Statement on Breast Imaging Clinical Rotations.

With regard to breast imaging, the JRCERT has determined programs must make every effort to place students in a breast imaging clinical rotation/procedure if requested and available. However, programs will not be expected to attempt to supersede clinical site policies that restrict breast imaging rotations/ procedures to students. Students should be advised that placement in a breast imaging rotation is not guaranteed.

The JRCERT reiterates that it is the responsibility of each clinical site to address any legal challenges related to a program's inability to place students in a breast imaging rotation. All students should be informed and educated about the various employment opportunities and potential barriers that may affect their ability to work in a particular clinical staff position.

Appendix N

JRCERT POSITION STATEMENT ON GONADAL SHIELDING IN THE CLINICAL SETTING

The Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards for an Accredited Educational Program in Radiography are designed to promote academic excellence, patient safety, and quality healthcare. Standard Five - Objective 5.3 of the Standards requires programs to assure students employ proper safety practices. Programs achieve this by instructing students in the utilization of imaging equipment, accessories, optimal exposure factors, and proper patient positioning to minimize radiation exposure to patients, selves, and others. These practices assure radiation exposures are kept as low as reasonably achievable (ALARA). Gonadal shielding has been a longstanding practice during radiography examinations in instances where the clinical objectives of the examination are not compromised[1]. Recent research[2] in the effectiveness of gonadal shielding during abdominal and pelvic radiography has found, in most instances, that: • gonadal shielding does not contribute significantly to reducing patient risk from radiation exposure; • gonadal shielding positioned improperly may have the unintentional consequence of increasing patient exposure; • gonadal shielding positioned improperly may result in the loss of valuable diagnostic examination results. Based on the recent research pertaining to the use of gonadal shielding during abdominal and pelvic radiography and the longstanding practice in radiography to only shield in instances in which diagnostic quality will not be compromised, the JRCERT has concluded that routine use of gonadal shielding for abdominopelvic radiography exams should not be standard practice for clinical radiography students when the use of such could interfere with the diagnostic quality of the exam and may result in the risk of a repeat exposure. Educational programs should review and consider amending, if necessary, policies to assure that the use of gonadal shielding should only be utilized when it will not interfere with the purpose of the examination and when it aligns with clinical facility policy. Consistent with Standard Five, programs must have policies/processes in place to assure students are educated on the importance of the proper use of shielding and optimal use of radiation to promote the health and safety of students, patients, and the public.

[1] [NCRP] National Council on Radiation Protection and Measurements. 2021. NCRP Recommendations for Ending Routine Gonadal Shielding During Abdominal and Pelvic Radiography. Bethesda (MD): National Council on Radiation Protection and Measurements. Statement No. 13.

[2] [FDA] U.S. Food and Drug Administration. 2020. Food and Drugs; radiation protection recommendations; radiological health; recommendations for the use of specific area gonadal shielding on patients during medical diagnostic x-ray procedures. Washington (DC): US Government Publishing Office. 21 CFR Part 1000.50.

Appendix O

Magnetic Resonance (MR) Environment Screening Form

The MR system has a very strong magnetic field that may be hazardous to individuals entering the MR environment or MR system room if they have certain metallic, electronic, magnetic or mechanical implants, devices or objects. Therefore, all individuals are required to fill out this form BEFORE entering the MR environment or MR system room.

Please indicate if you have any of the following:

☐ Yes	☐ No	Brain aneurysm clips/Brian surgery
☐ Yes	☐ No	Cardiac pacemaker
☐ Yes	☐ No	Implanted cardioverter defibrillator (ICD)
☐ Yes	☐ No	Electronic/Magnetically-activated implant or device
☐ Yes	☐ No	Heart surgery/Heart valve prosthesis
☐ Yes	☐ No	Shunts (*spinal or intraventricular*)
☐ Yes	☐ No	Shunts/Stents/Filters/Intravascular Coil
☐ Yes	☐ No	Spinal cord stimulator
☐ Yes	☐ No	Neurostimulator/Biostimulator
☐ Yes	☐ No	Insulin or other infusion pump
☐ Yes	☐ No	Implanted drug infusion device
☐ Yes	☐ No	Ear Surgery/Cochlear Implants/Stapes Prosthesis
☐ Yes	☐ No	Hearing aid (*remove before entering MR scan room*)
☐ Yes	☐ No	Eye Surgery/Implants/Eyelid Spring/Wires/Retinal Tack
☐ Yes	☐ No	Have you ever worked in a metal or machine shop?
☐ Yes	☐ No	Injury to the eye involving metal or metal shavings
☐ Yes	☐ No	Artificial or prosthetic limb
☐ Yes	☐ No	Orthopedic Pins/Screws/Rods
☐ Yes	☐ No	Joint replacement
☐ Yes	☐ No	Endoscopic video capsule
☐ Yes	☐ No	Endoscopy or Colonoscopy clips
☐ Yes	☐ No	Metal Mesh Implants/Wire Sutures/Wire Staples or Clips/Internal Electrodes
☐ Yes	☐ No	IUD, diaphragm or pessary
☐ Yes	☐ No	Tattoos/Permanent Make-up/Body Piercing/Patches
☐ Yes	☐ No	Metallic Foreign Bodies – Bullets/Shrapnel/BB
☐ Yes	☐ No	Any other internal/external implant or device

If you answered yes to any of the above, please explain: Click or tap here to enter text.

I attest that the above information is correct to the best of my knowledge. I read and understand the entire contents of this form. Should your status change during the academic year with regard to any potentially hazardous implants, devices, or objects, prior to MRI rotations or observations the MRI Program Director/Clinical Coordinator must be notified and you will be re-screened for MRI Safety clearance.

Student Name: Click or tap here to enter text. Concentration: Click or tap here to enter text.

Student Signature: Click or tap here to enter text. Date: Click or tap here to enter text.

Appendix P

Academic Calendar

Highlighted areas are additional dates for CT

FALL 2024

April 1, Monday	Online Registration Begins (Anticipated)
August 26, Monday	Classes Begin
September 1, Sunday	Last Day to Add Online
September 2, Monday	Labor Day (University Holiday - No Classes)
September 4, Wednesday	Last Day to Drop Without "W" Grade - Online Registration Ends Last Day for
October 9, Wednesday	Course Withdrawal
November 4, Monday	Online Registration for Spring 2025 Begins (Anticipated) Thanksgiving Break
November 27, Wednesday	Begins (After Classes End)
November 28, Thursday	Thanksgiving (University Holiday - No Classes)
December 1, Sunday	Thanksgiving Break Ends
December 2, Monday	Classes Resume
December 6, Friday	Classes End
December 9, Monday	Final Exams Begin
December 13, Friday	Final Exams End
December 16, Monday	Clinical rotations resume for make-up time/competency requirements
December 20, Friday	Grades Due and Made Available to Students

SPRING 2025

November 4, Monday	Online Registration Begins (Anticipated)
January 2, Thursday	Classes/Clinical Begin
January 5, Sunday	Last Day to Add Online
January 8, Wednesday	Last Day to Drop Without "W" Grade - Online Registration Ends
January 20, Monday	Martin Luther King, Jr. Day (University Holiday - No Classes; Day of Service)

February 16, Sunday	Last Day for Course Withdrawal
March 7, Friday - March 16, Sunday	Spring Break (After Classes End)
March 17, Monday	Classes Resume
March 31 Monday	Online Registration for Summer 2025, Fall 2025 Begins
April 18, Friday	Classes End
April 21, Monday	Final Exams Begin
April 25, Friday	Final Exams End
May 2, Friday	Grades Due and Made Available to Students
TBD	Commencement
SUMMER 2025	
March 31, Monday	Online Registration Begins (Anticipated)
April 28, Monday	Classes/Clinical Begin
May 4, Sunday	Last Day to Add Online
May 7, Wednesday	Last Day to Drop Without "W" Grade - Online Registration Ends
May 26, Monday	Memorial Day (University Holiday - No Classes)
June 18, Wednesday	Last Day for Course Withdrawal
July 4, Friday	Independence Day (University Holiday - No Classes)
August 15, Friday	Classes End
August 18, Monday	Clinical rotations resume for required make-up time/competency requirements
August 22, Friday	Grades Due and Made Available to Students
August 31, Sunday	Official graduation date for graduating MIRS students