Department of Medical Imaging and Radiation Sciences

DIAGNOSTIC MEDICAL SONOGRAPHY
AND
CARDIOVASCULAR SONOGRAPHY

Academic Policies and Clinical Education Handbook

2019-2020
**Notice of 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 Discrimination Act of 1975, the Americans with Disabilities Act, or Section 504 of the Rehabilitation Act is directed to contact their Student Affairs Dean 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 are required to pass a criminal background check and child abuse clearance. Some departments within the College, as well as some clinical sites may require students to be fingerprinted and/or drug tested. The Office of Admissions will provide you with the appropriate information to complete these requirements.

Clinical rotation and fieldwork sites that require a criminal background check, child abuse clearance and/or fingerprinting may deny a student’s participation in the clinical experience, rotation or fieldwork 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 or fieldwork 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 or not 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.

**Thomas Jefferson University** reserves the right to amend any 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 the College and the students or its employees.

*The Department of Medical Imaging and Radiation Sciences reserves the right to make policy and procedure changes at any time. Such changes will be distributed for insertion into the appropriate section of the Handbook. All students enrolled in any courses sponsored by the Department must comply with such changes at the time specified by the Department.*

Revised and Adopted August 2019
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HOMAS JEFFERSON UNIVERSITY MISSION
We improve lives and provide students with exceptional value in 21st century professional education.

THOMAS JEFFERSON UNIVERSITY VISION
We are reimagining health, education and discovery to create unparalleled value.

Jefferson (Philadelphia University + Thomas Jefferson University)
We are a comprehensive university with preeminence in transdisciplinary, experiential professional education, research and discovery, delivering exceptional value for the 21st century students with excellence in architecture, business, design, fashion, engineering, health, medicine, science and textiles - infused with the liberal arts.

MISSION OF THE DEPARTMENT & RADIOGRAPHY PROGRAM
The Mission of the Department of Medical Imaging & Radiation Sciences and the Radiography 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 life-long learning.
PROGRAM GOALS AND STUDENT LEARNING OUTCOMES

Goal # 1: Clinical Performance & Clinical Competence

Students will:

- Select appropriate transducers and use appropriate technical settings
- Demonstrate knowledge of proper patient prep
- Obtain appropriate images of highest obtainable technical quality
- Provide safe and quality patient care

Goal # 2: Problem Solving Skills & Critical Thinking

Students will:

- Adjust technical settings as needed based on patient body habitus and/or pathology
- Change transducers or patient position as needed for exam
- Critique images for diagnostic quality

Goal # 3: Communication Skills

Students will demonstrate appropriate and effective oral and written communication skills with patients and the interprofessional healthcare team.

Goal # 4: Professional Development & Growth

Students will:

- Integrate professional ethics and behavior into clinical practice
- Function as part of the interprofessional healthcare team
- Participate in professional growth development
THE HANDBOOK

This *Academic Policies and Clinical Education Handbook* serves as a guide for students enrolled in the Department of Medical Imaging and Radiation Sciences, Jefferson College of Health Professions, Thomas Jefferson University.

A Thomas Jefferson University student is required to uphold a high standard of academic and nonacademic conduct. That standard is presented in this document and will be upheld by the Department of Medical Imaging and Radiation Sciences. Academic and nonacademic misconduct at Thomas Jefferson University is subject to disciplinary action.

This handbook is given to matriculating students during orientation. The Department will obtain documentation of the receipt and review of the handbook.

Each student will be responsible for maintaining his/her knowledge of the information contained in the Academic Policies and Clinical Education Handbook, as well as the Jefferson College of Health Professions Catalog, and Jefferson College of Health Professions Student Handbook. See: www.jefferson.edu/handbook.
NATIONAL CERTIFICATION EXAMINATION

Graduates of the one-year and two-year\textsuperscript{1} programs 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), Medical Dosimetrist Certification Board (MDCB), and Nuclear Medicine Technology Certification Board (NMTCB), 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 JRCDMS). All programs, including the Computed Tomography, Invasive Cardiovascular Technology and PET/CT programs, are covered under the University’s accreditation by Middle States Commission on Accreditation.

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, he/she has the right to contact the accreditation body\textsuperscript{2}.

JRCDMS
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
Phone: (443) 973-3251
Fax: (866) 738-3444
http://www.jrcdms.org/

\textsuperscript{1} Two-year students in all programs EXCEPT sonography are NOT eligible for the certification exams until they have successfully earned a degree from Thomas Jefferson University.

\textsuperscript{2} Students in the CT, ICVT, or PET/CT Program should contact the Dean of JCHP
UNIVERSITY AND JCHP POLICIES AND PROCEDURES

While we have attempted to provide you with a comprehensive departmental handbook, it does not stand alone.

All students enrolled at Thomas Jefferson University are expected to follow a code of behavior consistent with the high standards of the health professions and to uphold the reputation of the University. In addition, students must comply with the rules and regulations duly established within the Jefferson College of Health Professions. See: www.jefferson.edu/handbook

For additional University and/or Jefferson College of Health Profession’s policies, including but not limited to Drug and Alcohol, Student Religious Observance, Medical Leave of Absence, Social Media, Student Personal Counseling Center, Occupational Health Network for Employees & Students, and Jefferson Emergency Procedures, also see: www.jefferson.edu/handbook
ACADEMIC POLICIES
POLICIES ON STUDENT PROGRESSION

COURSE REQUIREMENTS
1. Prerequisites for courses outlined in the curriculum must be met in order to follow the necessary educational sequence.
2. Students are responsible for accessing courses through Blackboard Learn (jefferson.blackboard.com) 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 the semester.
4. Students must complete the Health Insurance Portability and Accountability Act (HIPAA) and Safety Modules prior to matriculation.
5. Students are responsible for checking their Jefferson e-mail accounts daily. All Program related correspondence will occur through this account only.

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

1. A student who earns one course grade of C- or below in the Medical Imaging and 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. A student who earns two or more course grades of C- or below in the Medical Imaging and Radiation Sciences curriculum in any academic year will be dismissed from the program in which they are currently enrolled. Student will be subject to dismissal from the Department of Medical Imaging and Radiation Sciences.

3. A student who earns a course grade of F in any Medical Imaging and Radiation Sciences curriculum will be dismissed from the program in which they are currently enrolled. Student will be subject to dismissal from the Department of Medical Imaging and Radiation Sciences.

4. A two-year students who has been placed on departmental academic probation during his/her junior academic year, but has successfully completed their junior academic year, will be taken off departmental academic probation at the beginning of the senior academic year.

5. A student who is dismissed from the Department of Medical Imaging & Radiation Sciences due to unsatisfactory academic performance may, within one-year of the dismissal, apply for re-admission by submitting a written request directly to the Department Chairperson. After a one-year time period, all applications for readmission must be made through the Office of Admissions with a review by the Department Chair. Refer to the Readmission Procedure section of the Jefferson College of Health Professions Course Catalog for the JCHP Readmission Statement.

6. Students who are dismissed from the Department of Medical Imaging & Radiation Sciences due to unsatisfactory academic performance may, within one-year of the dismissal, apply for re-admission by submitting a written request directly to the
Department Chairperson. After a one-year time period, all applications for readmission must be made through the Office of Admissions with a review by the Department Chair. Refer to the Readmission Procedure section of the Jefferson College of Health Professions Course Catalog for the JCHP Readmission Statement.

7. Incomplete grades for a Medical Imaging and 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.

Every student is required to meet with his or her 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 and 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 a minimum number of clinical training hours (see clinical syllabus). All students must complete clinical competencies in accordance with the requirement of their certification body.

CLINICAL EDUCATION ELIGIBILITY

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

• Be a student in good academic standing in the Department of Medical Imaging and Radiation Sciences.
• Maintain a cumulative grade point average of 2.00 or higher.
• Provide and maintain proof of certification in adult, child and infant cardiopulmonary resuscitation (BLS/CPR/AED for Healthcare Provider).
• Meet program specific technical standards Appendix A.
• Complete all immunization requirements prior to commencing or resuming clinical courses. Failure to meet these health requirements will result in the delay of clinical practical or the failure of clinical courses.
• Be in compliance with the University requirements for influenza vaccination.
• Additional requirements may be needed.
• Students not in compliance are not permitted to attend classes or clinical

CLINICAL PRACTICES AND POLICIES

1. Attendance at clinical practical 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 is subject to review by the faculty.
4. Safe clinical or professional practice is defined as:
   a. Adhering to the Patients’ Bill of Rights - Appendix B.
   b. Performing clinical duties consistent with the professional Code of Ethics - Appendix C.
   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 D, E, & F (*only applicable to modalities that use ionizing radiation)
   f. Scope of Practice of Diagnostic Medical Sonographers. Appendix H.
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 Director and Clinical Coordinator, or dismissal.
- Third violation – dismissal from the Department.

Depending on the 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 and 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" on page 15.)

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 program/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 five (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 JCHP Student Handbook. For dismissal due to Unsafe Clinical Performance, students will follow the Policy on Dismissal for Unsafe Clinical Performance, which is published in the JCHP Student Handbook. See: www.jefferson.edu/handbook.

CLINICAL AFFILIATE ASSIGNMENT

The Program Director 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 serves to correlate didactic knowledge with practical skills. Students are not guaranteed specific clinical affiliates,
however, student input is considered. Should a student be dismissed from his/her clinical affiliate, the department does not guarantee replacement at an alternate site.

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 change to the appropriate 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 SUPERVISORS/INSTRUCTORS**

The clinical affiliate supervisors/instructors 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" on page 28.)
- Student clinical evaluation and feedback.
- Providing orientation to the clinical department.
- Providing feedback to the program director and clinical coordinator.

**RESPONSIBILITIES OF THE DEPARTMENT/CLINICAL COORDINATOR**

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

- Providing clinical education centers.
- 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 and 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 his/her 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 advisor at least once per semester.
• Maintaining safety and confidentiality of student records, instructional materials, and other program materials
• Students will provide safe and quality patient care including safe radiation practices for patient, self, and the healthcare team.
• Demonstrating clinical progression
• Corresponding in a timely fashion with all program faculty and administration.

CLINICAL POLICIES
DEPARTMENT POLICY ON CONDUCT

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

- Sleeping during a clinical assignment.
- 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 Clinical Coordinator of absence or lateness.
- Using any personal electronic devices including cell phones 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 should be discouraged from visiting the clinical affiliate. In particular, 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 and Radiation Science (RS) Department

- Students should discourage their family and friends from visiting the RS department while they (the students) are in class.
- Family and friends are not permitted to attend lectures or laboratory sessions
- Unaccompanied children are not permitted in the RS department.
- Students may not ask faculty or administrative staff to baby-sit for them.
- TJU’s liability insurance does not extend to students’ family and friends.

In the Medical Imaging and Radiation Science (RS) laboratories

- Only Medical Imaging and Radiation Science students with proper Jefferson ID are permitted in the laboratory.
- The students are not permitted to bring family members or friends in the laboratory 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 and Radiation Sciences department are not permitted in the RS laboratory unless they have signed a waiver to be used as a student volunteer.
• TJU’s liability insurance does not extend to students’ family and friends
• The students should inform the security guard on 1st floor Edison, both when entering and leaving the laboratory, outside of the regular assigned hours.
Failure to comply with the policy may result in disciplinary action up to and including dismissal from the program.

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 student’s 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 affiliate, he/she 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
Any student not complying with the policies listed will be removed from the clinical affiliate.
• Department Policy on Conduct
• Family Members/Friends Policy
• Personal Electronic Devices Policy
• Computer Policy
• Student Work Policy

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” on page 14
VENIPUNCTURE POLICY
The ARRT clinical competency requirements include performance of venipuncture for injection of contrast agents and radiopharmaceuticals.
In order 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 and Radiation Sciences.
- Have health insurance, as required by JCHP.
- Have completed a venipuncture certification course, as required by the Department of Medical Imaging and Radiation Sciences.
- Attend and complete institutional venipuncture training, as required by clinical affiliates.

HEALTH INFORMATION CONFIDENTIALITY POLICY:
HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)
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.

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

Option 1 The student may continue in the program if she chooses, without modifications to any component of the program.

Option 2 The student may take a leave of absence from clinical education, but continue her 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 her 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.
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 MRI Safety Screening prior to MRI rotations or observations.

1. Students will attend an MRI Safety lecture and be screened for MRI Safety clearance in Patient Care and Services in Medical Imaging and Radiation Sciences Fall Semester by the MRI Clinical Coordinator.
2. Students will abide by clinical affiliate MRI Safety Protocols during their clinical rotations and/or observations.
3. Students will notify the MRI 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 and Radiation Science students will not be fitted for a N95 respirator masks. RS student should NOT enter a patient's room that requires this form of personal protective equipment.

 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. Present a note to the Program Director and/or Clinical Coordinator from the Emergency Room Physician, University 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 diagnosis to the Program Director and/or Clinical Coordinator and the Clinical Affiliate Supervisor. The student may be asked to leave clinical until cleared by his/her physician and Jefferson Occupational Health Network. 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 BLOODBORNE PATHOGENS**

**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 splashed in your eye, rinse with tap water or with sterile saline.
3. If a fluid splashed 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 OHN.
6. Report to UHS at 833 Chestnut Street, Suite 205 (when OHN 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.

OHN will discuss the risks of your exposure and advise whether or not further treatment or evaluation is necessary. All testing in OHN is performed free of charge for Jefferson employees and students. 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 OHN is recommended on the next business day. Questions may be directed to Dr. O’Connor at ellen.oconnor@jefferson.edu.

Detailed information on Occupational Health Network for Employees & Students may be viewed on the OHN website: https://hospitals.jefferson.edu/departments-and-services/occupational-health-network.html. In addition, the needlesticks website, an internal website accessed through Blackboard, has comprehensive summaries of the various topics involving occupational exposures.

Occupational Health Network for Employees & Students is located at 833 Chestnut Street, Suite 205 and is open 7:30am – 4:00pm Monday through Friday. The phone number is (215) 955-6835.
ATTENDANCE REGULATIONS
DIDACTIC/LABORATORY INSTRUCTION

Each course syllabus details the attendance policy.

CLINICAL ATTENDANCE RECORDS

Time cards/Attendance Sheets provided by the Department are used for documenting clinical hours. Each student must personally sign or clock "in" and "out." Students who have to sign-in (i.e. no time clock punch) must write down the time and have the designated staff initial next to the signed time. Time not documented must be made up. Under no circumstances is it permissible to sign-in or out or clock-in or out for another student. Any student found guilty of such an offense is subject to dismissal.

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. Hours exceeding the limitations must be voluntary on the student’s part.

Clinical Affiliate Supervisors may re-schedule students (within an assigned eight hours) to provide complete exposure to the unique learning opportunities in Medical Imaging and Radiation sciences. The Clinical Affiliate Supervisor 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 hours). It is not accruable nor is it transferable. A personal time request form must be submitted to the Program Director or Clinical Coordinator. The Clinical Affiliate Supervisor and Program Director and/or Clinical Coordinator MUST be notified when a student is out of clinical.

ABSENCE POLICY

Attendance is required for all clinical education sessions. Students absent from a clinical assignment must call or email the Clinical Affiliate Supervisor and Program Director and/or Clinical Coordinator prior to the start of the shift. Three or more consecutive absences require a doctor’s note. However, any sick days (even with a doctor’s note) are not considered excused absences – make-up time will be required. Extenuating circumstances will be dealt with on an individual basis.

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. Absences must be made up at the discretion of the faculty.

**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 program.

It is the policy of the Department of Medical Imaging and Radiation Sciences that any student who is going to be late must notify both the Clinical Affiliate Supervisor and the 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 program.

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

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

The make-up time form is signed upon fulfillment of the time missed. The form will be submitted to the Program Director and/or Clinical Coordinator.

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

**POLICY CONCERNING DEATH IN THE FAMILY**

Upon notification to 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, the student 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 Class Day Pinning Ceremony. They 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.

HONORS AND AWARDS
Students are eligible for:
- Department awards for outstanding overall performance
- Awards for clinical excellence.
Awards are presented during the Class Day 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 Institute of Ultrasound in Medicine (AIUM)
- Society of Diagnostic Medical Sonography (SDMS)
- Society for Vascular Ultrasound (SVU)
- American Society of Allied Health Professions (ASAHP)
- American Society of Echocardiography (ASE)
- American Society of Radiologic Technologists (ASRT)
- Delaware Valley Echo Society (DVES)
- Greater Delaware Valley Ultrasound Society (GDVUS)
- Northeastern Pennsylvania Vascular Chapter (NEPVC)
- Philadelphia Regional Vascular Student Chapter (PRVSC)
- Association of Collegiate Educators in Radiologic Technology (ACERT)

HONOR SOCIETIES
- Lambda Nu Society
  - Honor society for Radiologic and imaging science professionals
  - http://www.lambdanu.org
ADDITIONAL POLICIES
DIRECT AND INDIRECT 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 Sonographer

**Direct supervision** assures patient safety and proper educational practices. Direct supervision is defined as student supervision by a qualified sonographer 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.

**Indirect Supervision** promotes patient’s safety and proper educational practices. The indirect supervision is defined as that supervision provided by a qualified sonographer immediately available to assist students regardless of the level of student achievement. “Immediately available” is interpreted as the presence of a qualified sonographer adjacent to the room or location where the procedure is being performed.

The presence of a qualified sonographer during the repeat of an unsatisfactory image assures patient safety and proper educational practices.
DRESS CODE AND APPEARANCE POLICY

UNIFORMS

• The dress code for students enrolled in Medical Imaging and Radiation Sciences programs consists of navy blue hospital scrubs (tops and bottoms) with TJU patch sewn on the right sleeve.

• A short, white lab coat with the Jefferson patch on the right shoulder may be worn. A cardigan sweater (button-down front) of solid navy blue or solid white may be substituted for the lab coat. A white or navy blue, mock turtleneck may also be worn under the scrub top in the fall and winter seasons.

• Name tags must be visible to patient and staff and worn at all times.

• Solid white or black, leather footwear or solid white or black low-top sneakers. Clogs, sandals or open-toed shoes are not permitted. Students are responsible for keeping shoes neat, clean, and polished. Shoestrings should also be kept clean and properly tied.

APPEARANCE

• Students are required to practice good personal hygiene and present a professional appearance at all times.

• Appropriate and clean attire is required during ALL clinical and didactic sessions.

• Unacceptable apparel includes: short skirts/pants, torn/ripped garments, low-cut tops, lewd and/or suggestive slogans on any clothing

• Keep hair, mustaches and beards neatly trimmed. Long hair must be tied back.

• Fingernails:
  - No artificial nails.
  - No nail polish.
  - Nail length must be less than ¼ inches.

• Keep jewelry to a minimum. Earrings should be of the small post type (no hoops).

• Any body piercing besides the ears should not be evident at clinical affiliate. Tongue rings are unacceptable and are not allowed to be worn.

• Wear makeup conservatively. No perfumes, colognes, lotions or powders are to be worn at clinical sites.

• Any visible tattoos must be appropriately covered.

• Chewing gum is not permitted.

• Students are required to wear identification and radiation badges supplied by Thomas Jefferson University, and Clinical Affiliate Sites if provided, at all times.

Non-compliance

Any student not complying with the dress code and appearance policy will be removed from the clinical affiliate. Any clinical time missed due to a dress code and appearance 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.
Appendix A

Department of Medical Imaging and Radiation Sciences
Jefferson College of Health Professions
Thomas Jefferson University

TECHNICAL STANDARDS FOR PROGRAMS IN THE DEPARTMENT OF MEDICAL IMAGING AND RADIATION SCIENCES

Physical Demands
Clinical and laboratory assignments for the Sonography program require certain physical demands that are the minimum technical standards for admission. Listed below are the technical standards that all students must meet in order to enter and complete the Sonography program.

*The prospective student must be able to routinely:*
- Bend, stoop, reach and stretch the arms and body, often utilizing awkward and non-ergonomically correct positions
- Assist patient on/off examination tables
- Work standing on one’s feet 80% of the time
- Have sufficient manual dexterity to manipulate the ultrasound transducer and operator controls
- Have sufficient gross and fine motor coordination to implement skills related to the performance of ultrasound such as positioning, transporting and scanning patients.
- Sonographers must be able to manipulate heavy ultrasound equipment, such as for portable examinations, move patient beds, and must be able to assist patients that are unable to assist themselves. Also must be able to lift up to 50 lbs.
- Have sufficient auditory perception to receive verbal communication from patients and members of the healthcare team. This includes assessing the health needs of patients through the use of cardiac/respiratory monitors, fire alarms, intercoms, etc.
- Sufficient visual acuity to view grayscale and color images on a computer monitor or film, and read written reports, chart orders, etc.
- Interact compassionately with the sick or injured
- Perform proper steps in a procedure in an organized manner and in a specific sequence
- Have the ability to write or otherwise provide a preliminary report using sonographic terminology
- Communicate effectively with patients and other health care providers. This includes verbal, reading and writing skills.
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 your 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 your 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 your 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 your 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.
Appendix C

Code of Ethics for the Profession of Diagnostic Medical Sonography
Approved by SDMS Board of Directors, December 6, 2006

PREAMBLE
The goal of this code of ethics is to promote excellence in patient care by fostering responsibility and accountability among diagnostic medical sonographers. In so doing, the integrity of the profession of diagnostic medical sonography will be maintained.

OBJECTIVES

1. To create and encourage an environment where professional and ethical issues are discussed and addressed.
2. To help the individual diagnostic medical sonographer identify ethical issues.
3. To provide guidelines for individual diagnostic medical sonographers regarding ethical behavior.

PRINCIPLES

Principle I: In order to promote patient well-being, the diagnostic medical sonographer shall:

A. Provide information to the patient about the purpose of the sonography procedure and respond to the patient's questions and concerns.

B. Respect the patient's autonomy and the right to refuse the procedure.

C. Recognize the patient's individuality and provide care in a non-judgmental and non-discriminatory manner.

D. Promote the privacy, dignity and comfort of the patient by thoroughly explaining the examination, patient positioning and implementing proper draping techniques.

E. Maintain confidentiality of acquired patient information, and follow national patient privacy regulations as required by the "Health Insurance Portability and Accountability Act of 1996 (HIPAA)."

F. Promote patient safety during the provision of sonography procedures and while the patient is in the care of the diagnostic medical sonographer.

Principle II: To promote the highest level of competent practice, diagnostic medical sonographers shall:
A. Obtain appropriate diagnostic medical sonography education and clinical skills to ensure competence.

B. Achieve and maintain specialty specific sonography credentials. Sonography credentials must be awarded by a national sonography credentialing body that is accredited by a national organization which accredits credentialing bodies, i.e., the National Commission for Certifying Agencies (NCCA) or the International Organization for Standardization (ISO).

C. Uphold professional standards by adhering to defined technical protocols and diagnostic criteria established by peer review.

D. Acknowledge personal and legal limits, practice within the defined scope of practice, and assume responsibility for his/her actions.

E. Maintain continued competence through lifelong learning, which includes continuing education, acquisition of specialty specific credentials and recredentialing.

F. Perform medically indicated ultrasound studies, ordered by a licensed physician or their designated health care provider.

G. Protect patients and/or study subjects by adhering to oversight and approval of investigational procedures, including documented informed consent.

H. Refrain from the use of any substances that may alter judgment or skill and thereby compromise patient care.

I. Be accountable and participate in regular assessment and review of equipment, procedures, protocols, and results. This can be accomplished through facility accreditation.

**Principle III: To promote professional integrity and public trust, the diagnostic medical sonographer shall:**

A. Be truthful and promote appropriate communications with patients and colleagues.

B. Respect the rights of patients, colleagues and yourself.

C. Avoid conflicts of interest and situations that exploit others or misrepresent information.

D. Accurately represent his/her experience, education and credentialing.
E. Promote equitable access to care.

F. Collaborate with professional colleagues to create an environment that promotes communication and respect.

G. Communicate and collaborate with others to promote ethical practice.

H. Engage in ethical billing practices.

I. Engage only in legal arrangements in the medical industry.

J. Report deviations from the Code of Ethics to institutional leadership for internal sanctions, local intervention and/or criminal prosecution. The Code of Ethics can serve as a valuable tool to develop local policies and procedures.
Appendix D

Radiation Protection Practices

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.

3. A student will always wear radiation dosimeters in the Clinical Site.

4. A student will wear the radiation film badge outside the clothing, on the torso. A ring badge will be worn when handling radioactive materials.

5. A student will always remove personal radiation dosimeters while having diagnostic medical or dental radiographs taken.

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

9. A student may not perform procedures utilizing ionizing radiation on other students or staff at their request without a prescription for the exam by a physician. The student will be dismissed from the program for this violation.*

10. A technologist or physician may not perform procedures utilizing ionizing radiation on a student without a prescription for the exam from the student’s physician. The student will be dismissed from the program for this violation.*

*(PA Code, Title 25. Environmental Protection. Department of Environmental Protection, Chapter 211.11.)
APPENDIX E

Personal Radiation Monitoring

PERSONNEL RADIATION MONITORING

1. Each student is responsible for wearing properly dated radiation dosimeter(s) (body and ring badges) at Clinical Affiliate Sites and in laboratory classes. No student will be allowed in clinical or the laboratory class without properly dated radiation dosimeter(s) appropriately worn.

2. Any student who does not have the properly dated radiation dosimeter(s) will be suspended from his or her clinical area until he/she has the properly dated radiation monitor. Time lost from the clinical area must be made up.

3. Dosimeters will be given to students each month.

4. Each student is responsible for exchanging the radiation dosimeter(s) on the designated day of each month. Radiation dosimeters are exchanged with the Program Director or Clinical Coordinator.

5. Dosimeter loss or accident must be reported immediately to the Program Director or Clinical Coordinator. The cost of lost radiation dosimeters is the responsibility of the student.

6. Each student is responsible for submitting their dosimeter(s), on time.
   - A $20.00 cash fee will be collected for all unreturned or late radiation dosimeters.

7. The Program Director or Clinical Coordinator receives monthly radiation dose reports from the Radiation Safety Officer, and informs each student of his/her exposures.

8. Monthly radiation exposures for students must not exceed the maximum permissible dosage to occupationally exposed persons as established by state and federal agencies for radiologic health.

9. The Office of Radiation Safety maintains a history of each individual’s exposure and anyone may examine his/her own radiation exposure record, or obtain a copy by sending a signed, written request to the Radiation Safety Office.

10. “High” Radiation Dosimeter Readings
    High or unusual radiation dosimeter readings are investigated by Thomas Jefferson University’s Radiation Safety Officer. Readings above designated “Investigation Levels” are evaluated with regard to workload and type of duties performed by the dosimeter wearer; adherence to proper work practices; proper care and use of the dosimeter; and possible exposure of the dosimeter to “non-occupational” radiation sources. In cases where it appears that the high readings may be due to inadequate safe work practices or improper use or storage of the dosimeter(s), the wearer is counseled by Radiation Safety Officer and/or the wearer’s supervisor(s).
11. On completion of the clinical rotation students must return their radiation dosimeter(s) to the Program Director or Clinical Coordinator. Students will be billed for unreturned badges.
PURPOSE

To assess employee occupational radiation dose from ionizing radiation sources external to the body.

POLICY

Radiation dosimeters (“individual monitoring devices” as defined in 10 CFR 20.1203) are to be issued for the purpose of assessing occupational radiation dose as follows:

1. Radiation dosimeters are to be issued to anyone (employee/student/volunteer) whose assigned duties involve potential exposure to ionizing radiation and whom the Radiation Safety Officer has determined meets the requirements for individual monitoring devices as described in applicable federal or state regulations.

2. Radiation dosimeters may also be required for individuals in specific work areas or performing designated tasks, even if not required by state or federal regulations.

3. Radiation dosimeters may be offered as an option to individuals in areas where use of individual monitoring devices is not required by regulations, but where employees may have concerns about their level of radiation exposure. Optional use must be approved by the appropriate Department and/or Division Head and the RSO.

4. Radiation dosimeter readings are routinely reviewed by Radiation Safety Staff and appropriate follow-up action taken as may be indicated by the results.

Definitions:

For the purposes of this Policy and related procedures, the following terms are defined:
“ALARA Investigation Levels” are pre-set dosimeter reading values that trigger formal reviews by Radiation Safety Staff. [ALARA stands for “as low as reasonably achievable” and is a radiation protection philosophy whereby the objective is to keep radiation doses to individuals and populations as far below (maximum) regulatory limits “as is reasonably achievable”.

“ALARA Investigation Level 1” means total radiation doses in any single calendar quarter (e.g., January 1 to March 31) above the following:

- Effective Dose Equivalent (EDE) [“whole body”] above 125 mrem
- Lens Dose Equivalent (LDE) above 375 mrem
- Shallow (“Skin”) Dose Equivalent (SDE) above 1250 mrem
- Extremity Dose reading above 1250 mrem

“ALARA Investigation Level 2” means total radiation doses in any single calendar quarter (e.g., January 1 to March 31) above the following:

- Effective Dose Equivalent (EDE) [“whole body”] above 375 mrem
- Lens Dose Equivalent (LDE) above 1125 mrem
- Shallow (“Skin”) Dose Equivalent (SDE) above 3750 mrem
- Extremity Dose reading above 3750 mrem

“Dose Equivalent” means the absorbed radiation dose to a human being, modified by appropriate radiation weighting factors, depending on the type of ionizing radiation source, or tissue/organ weighting factors (as may be necessary).
“Deep Dose Equivalent” (“DDE”) means the dose equivalent (tissue dose from external radiation sources) determined for a tissue depth of 1.0 cm, as measured by a radiation dosimeter.

“Effective Dose Equivalent” (“EDE”) [for the purposes of this policy] means the deep dose equivalent (tissue dose from external radiation sources at 1 cm below the surface of the skin) as measured by a radiation dosimeter, adjusted where appropriate by mathematical formulas to take into account the wearing of protective lead garments in the presence of diagnostic energy x-ray radiation.

“Extremity Dose” means the dose equivalent (tissue dose from external radiation sources) to the hands or forearms (below the elbows), or to the feet or lower legs (below the knees) determined for a tissue depth of 0.007 cm, as measured by a radiation dosimeter (e.g., ring dosimeter).

“Lens Dose Equivalent” (“LDE”) means the dose equivalent (tissue dose from external radiation sources) determined for a tissue depth of 0.3 cm, as measured by a radiation dosimeter.

“Millirem (mrem)” is a unit of measure for any “dose equivalent” term.

“Radiation dosimeters” (aka “individual monitoring devices”) means devices designed to be worn by a single individual for the assessment of dose equivalent such as film badges, thermoluminescence dosimeters (TLDs), pocket ionization chambers, etc.
“Shallow (‘Skin’) Dose Equivalent” (‘SDE’) means the dose equivalent (tissue dose from external radiation sources) determined for a tissue depth of 0.007 cm, as measured by a radiation dosimeter.

Procedures:

[The following procedures and/or requirements have been approved by the Jefferson Radiation Safety Committee and instituted by the Radiation Safety Officer under his authority as established by federal and state regulations and institutional policy.]

Dosimeter Wearer Responsibilities

1. Regardless of whether the dosimeters are issued as required or optional, any employee who is issued any dosimeter is responsible for:

   a. Wearing the dosimeter while on duty in those areas where there is a potential for radiation exposure.

   b. Exchanging worn dosimeters for new ones on the first workday of each wear period (e.g., first day of month or calendar quarter, depending on assigned wear period), unless the new replacement dosimeters' arrival has been delayed, in which case the exchange may be made as soon as possible after the arrival of the new dosimeters).

   c. Taking proper care of dosimeters, as described by Office of Radiation Safety instructions, to avoid damaging or contaminating the dosimeters.

   d. Not storing dosimeters near radiation sources when not being worn.

   e. Not wearing dosimeters when being exposed to radiation sources for personal medical purposes (The wearer should notify Radiation Safety if this inadvertently occurs or if administered a radiopharmaceutical).

   f. Notifying Radiation Safety immediately whenever dosimeters are lost, accidentally damaged, name change is required, place of work has changed, or any reason why accidental exposure may have occurred (i.e., dosimeter accidentally left near source when not worn).

   g. Returning all dosimeters and holders upon termination of duties with/near radiation sources.

   h. Notifying Radiation Safety/dosimeter distributor of pending employment termination.

   i. Otherwise wearing assigned dosimeters in accordance with any other Office of Radiation Safety instructions.
2. Failure to comply with guidelines and responsibilities listed above may result in forfeiture of (optional) dosimeters and/or disciplinary action.

3. Any inquiries related to dosimeter use should be directed to the individual’s supervisor, dosimeter distributor, or Radiation Safety.

Dosimeter Issuance:

Dosimeters are issued and distributed in accordance with internal Radiation Safety Department Procedure RSO-041: “Badging and Distribution”

Review of Dosimetry Readings

1) Dosimetry reports from Jefferson’s dosimetry provider (currently Mirion Technologies) should be reviewed by designated Radiation Safety staff within 5 business days of receipt.

2) Review of dosimetry results by the Radiation Safety Officer or Senior Health Physicist are to be performed at least quarterly.

3) The purposes of such reviews are to:
   a) Determine if the reading is valid (accurately represents occupational radiation dose)
   b) Identify possible opportunities for intervention to reduce future dose

4) The reviewer is to examine readings for the following:
   a) Individual readings substantially above others doing similar work
   b) Individual readings substantially above the wearer’s past recorded readings
   c) Evidence of misuse or damage to the dosimeter
   d) Evidence of radioactive contamination to the dosimeter
   e) Calendar quarter total dose readings above “ALARA Investigation Levels” (see definitions)
   f) Evidence that the wrong analysis algorithms were applied by the vendor in generating the reported reading
   g) Evidence that the dosimeter had not been properly designated (e.g., “whole body” instead of “collar w/ EDE”)
   h) Any other contributing factor as may be identified in the vendor’s report notes.

5) The reviewer is to specifically review the DDE, EDE, SDE, LDE, and extremity readings for the dosimeter wear period and the calendar quarter-to-date and year-to-date totals for compliance with occupational dose limits and for any trending that may indicate that annual dose limits could potentially be exceeded.

6) The reviewer is to look for possible causes for high or unusual readings including:
   a) Badges not being properly worn (wrong location, wrong orientation, worn outside of holder, etc.)
   b) Sub-optimal work practices by the wearer
c) Dose to the dosimeter while not being worn (dosimeter left in room during procedures, dose stored near a radiation source or otherwise in a high background area, etc.)

d) Dose due to the wearer undergoing a medical procedure involving radiation (e.g., wearer administered a Nuclear Medicine radiopharmaceutical as a patient)

e) Dosimeter exposed to unusual environmental conditions (e.g., excessive heat)

f) Any other potential cause

7) Regarding the review/investigation process:
   a) Reviews/investigations may require personal contact with the wearer and/or wearer’s supervisor in order to perform an evaluation as per the preceding item 4.
   b) All total readings above “ALARA Investigation Levels” are to be performed and documented. “Level 2” investigations should include direct contact with the wearer and evaluation of work practices where feasible, unless the readings are consistent with an historical pattern previously determined to be reasonable for the workload and practices employed.
   c) All ALARA Level Investigations are to be documented.
   d) Summary reports of readings above ALARA Investigation Levels are reported to the Radiation Safety Committee at its regular quarterly meetings.

8) Readings for dosimeters issued to specifically assess radiation dose to embryo/fetus of a pregnant individual are to be closely scrutinized with regard to cumulative dose being acquired through the gestation period, in case intervention (e.g., job reassignment) is necessary to assure that applicable dose limits are not exceeded.

Dose History Adjustments:

1) Readings determined to be due to non-occupational radiation sources, or to be inaccurate due to some identifiable cause, may be adjusted.

2) Adjustments to the wearer’s occupational dose history are made after review by the Radiation Safety Officer by notifying the dosimetry vendor in writing, in accordance with the vendor’s procedures.

Reports to Wearers:

1. Dosimeter wearers will be notified of radiation doses as obtained as per the criteria specified in regulations contained in 10 CFR 19 or any other applicable state or federal regulation.

2. Individuals may be notified if their cumulative readings in any calendar quarter exceed pre-established ‘investigation levels’, or if any unusual or apparently ‘high’ dosimeter reading(s) are identified by Radiation Safety personnel.

3. Regular dose reports [excised of personal information other than dosimeter wearer id number] are provided to the dosimeter distribution group distributor for availability to wearers.
4. Individuals may also obtain their dosimeter results by making proper request to the Office of Radiation Safety. Such requests generally are required to be made in writing to protect the individual’s personal information from release to unauthorized personnel.

Confidentiality:

1. Individual radiation dose readings are considered as protected information and access to this information is limited to Radiation Safety personnel, supervisors, program directors, management personnel, members of the Radiation Safety Committee, regulatory inspectors, or others (with RSO approval) with a legitimate need-to-know,

2. Release of individual dose information in any circumstances is limited to the minimum necessary.

3. Any other personal information obtained by the Office of Radiation Safety in the administration of the dosimeter program is treated as confidential.

Attachment(s): na

References and Citations:

Internal Office of Radiation Safety Procedure RSO-041 “Badging and Distribution”

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

Title 10, Code of Federal Regulations (10 CFR) as incorporated by reference in Title 25 Pa. Code Chapter 219; specific sections as follows:
10 CFR 20.1003 (definitions)
10 CFR 20.1201; 20.1207; 20.1208 (re occupational dose limits)
10 CFR 20.1502 (requirements for use of individual monitoring devices)

Original Issue Date: 11/01/2000
Revision Date(s): 07/31/2012; 08/07/2014
Review Date(s): 11/08/06, 05/16/2011, 07/31/2012, 7/01/14; 08/07/2014; 06/08/15
Responsibility for maintenance of policy: John C. Keklak

[Signature on File]
Approved by: [signature on file]

John C. Keklak 

Radiation Safety Officer

Thomas Jefferson University Hospitals, Inc./Thomas Jefferson University
APPENDIX G

DESCRIPTIONS OF CLINICAL EDUCATION FORMS

The Clinical Evaluation Packet

1. Attendance Record
2. Competency Checklist
3. List of competencies
4. Clinical Exam Logbook
5. Clinical Evaluation Form
6. Site Evaluation Form
7. Attitude & Professionalism Evaluation
8. Clinical Education Development Plan

The specific forms required for each rotation may vary. The Supervising Sonographer will distribute the requirements for each packet at the beginning of the clinical rotation. Each item of the clinical packet is described below:

1. **Attendance Record**
   Completion and the recording of all assigned clinical hours. Timesheets are found in the front of the clinical exam logbook. Time sheets must be signed by the Clinical Affiliate Supervisor for verification before submitting them with the clinical packet. One is required with every packet. Hours for that rotation must be totaled.

2. **Competency Checklist**
   This form is used to document the learner’s progress toward achievement of entry-level and progressive competencies required for the completion of the program. A student who does not perform satisfactorily in the first attempt to pass a Competency will be permitted additional attempts. All evaluations attempted must be submitted to the Clinical Coordinator. The Clinical Affiliate Site may request that an examination be repeated at any time; this is called a Challenge. If such a request is made, the student will receive faculty advisement for the requested repeat. An average grade of A or B is required to pass a Competency.
3. **List of Competencies**  
   This is a list of key components or tasks necessary. The Competencies are assigned by the Clinical Coordinator and are expected to be fulfilled within a given rotation period and/or prior to graduation. These forms are to be completed by the Supervising Sonographer and are required with every packet.

4. **Clinical Exam Logbook**  
   The student will maintain a record of all ultrasound examinations observed or performed by the student in the clinical area. The date, exam type and findings will be documented for each patient. The Clinical Exam Log is required with every packet.

5. **Clinical Evaluation Form**  
   This form documents comments related to the student’s mastery of professionalism, scanning ability, and image evaluation skills. It is also used to evaluate the level of the student’s performance during a particular rotation and the level of a student’s performance compared to an entry-level sonographer. It will be completed and signed by the Supervising Sonographer. The supervising Sonographer and student should discuss the ratings on this form. The student will then sign the form. One Clinical Evaluation Form should be with each packet.

6. **Site Evaluation Form**  
   The Site Evaluation Form allows the student to evaluate their experience at the site they are placed. This provides an opportunity to give feedback on the staff, equipment, availability of exams and the learning environment. One is required with every packet.

7. **Attitude and Professionalism**  
   This form is for the Clinical Site Supervisor to evaluate the students on professional behavior, communication skills, and critical thinking skills. This form evaluates the student on the affective domain of his/her clinical education.

8. **Clinical Education Developmental Plan**  
   This is a plan which will outline the students goals for the semester as developed and discussed with the Clinical Affiliate Supervisor at the beginning of the semester.
APPENDIX H

SCOPE OF PRACTICE AND CLINICAL STANDARDS FOR DIAGNOSTIC MEDICAL SONOGRAPHER.
April 12, 2015

SCOPE OF PRACTICE REVISION PROCESS
In May 2013, representatives of sixteen organizations came together to begin the process of revising the existing Scope of Practice and Clinical Practice Standards. Thus began a process that engaged the participating organizations in an unrestricted dialogue about needed changes. The collaborative process and exchange of ideas has led to this document, which is reflective of the current community standard of care. The current participants recommend a similar collaborative process for future revisions that may be required as changes in ultrasound technologies and healthcare occur.

PARTICIPATING ORGANIZATIONS
The following organizations participated in the development of this document. Those organizations that have formally endorsed the document are identified with the “†” symbol. Supporting organizations are identified with the “*” symbol.
• American College of Radiology (ACR)
• American Congress of Obstetricians and Gynecologists (ACOG) *
• American Institute of Ultrasound in Medicine (AIUM)
• American Registry for Diagnostic Medical Sonography (ARDMS)
• American Registry of Radiologic and Radiation Technologists (ARRT)
• American Society of Echocardiography (ASE) †
• American Society of Technologists (ASRT)
• Cardiovascular Credentialing International (CCI)
• Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)
• Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT)
• Society of Diagnostic Medical Sonography (SDMS) †
• Society of Radiologists in Ultrasound (SRU)
• Society for Maternal-Fetal Medicine (SMFM)
• Society for Vascular Surgery (SVS) †
• Society for Vascular Ultrasound (SVU) †
• Sonography Canada (formerly the Canadian Society of Diagnostic Medical Sonography)

LIMITATION AND SCOPE.
Federal and state laws accreditation standards, and lawful faculty policies and procedures supersede these standards. A diagnostic medical sonographer, within the boundaries of all applicable legal requirements and restrictions, exercises individual thought, judgment, and discretion in the performance of an examination taking into account the facts of the individual case. This document is intended to set forth the standards in major areas of the diagnostic medical sonographer’s responsibilities. It does not cover all areas or topics that may present themselves in actual practice. In addition, technological changes or changes in medical practice may require modification of the standards.

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SCOPE OF PRACTICE AND CLINICAL STANDARDS FOR THE DIAGNOSTIC MEDICAL SONOGRAPHER

The purpose of this document is to define the scope of practice and clinical standards for diagnostic medical sonographers and describe their role as members of the healthcare team. Above all else, diagnostic medical sonographers act in the best interest of the patient.

DEFINITION OF THE PROFESSION

Diagnostic medical sonography is a multi-specialty profession comprised of abdominal sonography, breast sonography, cardiac sonography, obstetrics/gynecology sonography, pediatric sonography, phlebology sonography, vascular technology/sonography, and other emerging clinical areas. These diverse areas all use ultrasound as a primary technology in their daily work.

The diagnostic medical sonographer is an individual who provides patient care services using ultrasound and related diagnostic procedures. The diagnostic medical sonographer must be educationally prepared and clinically competent as a prerequisite to professional practice. Demonstration and maintenance of competency through certification by a nationally recognized sonography credentialing organization is the standard of practice in sonography, and maintenance of certification in all areas of practice is endorsed.

The diagnostic medical sonographer:
• Functions as a delegated agent of the physician; and
• Does not practice independently.

Diagnostic medical sonographers are committed to enhanced patient care and continuous quality improvement that increases knowledge and technical competence. Diagnostic medical sonographers use independent, professional, ethical judgment, and critical thinking to safely perform diagnostic sonographic procedures.

A fundamental approach to the safe use of diagnostic medical ultrasound is to apply elements of the As Low As Reasonably Achievable (“ALARA”) Principle including lowest output power and the shortest scan time consistent with acquiring the required diagnostic information. The diagnostic medical sonographer uses proper patient positioning, tools, devices, equipment adjustment, and ergonomically correct scanning techniques to promote patient comfort and prevent compromised data acquisition or musculoskeletal injury to the diagnostic medical sonographer.

DIAGNOSTIC MEDICAL SONOGRAPHER CERTIFICATION/CREDENTIALING

A diagnostic medical sonographer must be competent in any sonographic procedure they perform. Certification by a sonography credentialing organization that is accredited by National Commission of Certifying Agencies (NCCA) or the American National Standards Institute - International Organization for Standardization (ANSI – ISO) represents “standard of practice” in diagnostic sonography.

Despite the commonality of ultrasound technology across the field of sonography, the bodies of knowledge, technical skills, and competencies of sonographers in different areas of sonography specialization are markedly different. If performing procedures in any of the following primary areas of sonography specialization, a diagnostic medical sonographer must demonstrate
competence in the specialty area(s) through appropriate education, training, and certification:

1. Abdominal Sonography
2. Obstetrical/Gynecological Sonography
3. Cardiac Sonography
4. Vascular Technology/Sonography

If the diagnostic medical sonographer specializes or regularly performs procedures in secondary area(s) of specialization (e.g., breast sonography, fetal cardiac sonography, musculoskeletal sonography, pediatric sonography, phlebology sonography, etc.), the diagnostic medical sonographer should demonstrate competence through certification in the area(s) of practice by a nationally recognized sonography credentialing organization. Employers and accrediting organizations should require maintenance of diagnostic medical sonographer certification in all areas of practice.

NOTE: Temporary or short-term situational exceptions to the certification standard of practice may be necessary (in accordance with applicable federal and state laws and facility policy). For example:
1. Students enrolled in an accredited educational program who are providing clinical services to patients under the direct supervision of an appropriately certified sonographer or other qualified healthcare provider;
2. Sonographers who are cross-training in a new sonography specialty area under the direct supervision of an appropriately certified sonographer or other qualified healthcare provider; and
3. Sonographers who are providing emergency assessment in an urgent care environment where an appropriately certified sonographer is not available in a timely manner.

DIAGNOSTIC MEDICAL SONOGRAPHY CLINICAL STANDARDS

Standards are designed to reflect the behavior and performance level expected in clinical practice for the diagnostic medical sonographer. These clinical standards set forth the principles that are common to all of the specialties within the larger category of the diagnostic sonography profession. Individual specialties or clinical areas may extend or refine, but not limit, these general principles according to their specific practice requirements.

SECTION 1

STANDARD – PATIENT INFORMATION ASSESSMENT AND EVALUATION:
1.1 Information regarding the patient's past and present health status is essential in providing appropriate diagnostic information. Therefore, pertinent data related to the diagnostic sonographic procedure should be collected and evaluated to determine its relevance to the examination. The diagnostic medical sonographer:
1.1.1 Verifies patient identification and that the requested examination correlates with the patient's clinical history and presentation. In the event that the requested examination does not correlate, either the supervising physician or the referring physician will be notified.
1.1.2 In compliance with privacy and confidentiality standards, interviews the patient or their representative, and/or reviews the medical record to gather relevant
information regarding the patient's medical history and current presenting indications for the study.
1.1.3 Evaluates any contraindications, insufficient patient preparation, and the patient's inability or unwillingness to tolerate the examination and associated procedures.

STANDARD – PATIENT EDUCATION AND COMMUNICATION:
1.2 Effective communication and education are necessary to establish a positive relationship with the patient or the patient's representative, and to elicit patient cooperation and understanding of expectations. The diagnostic medical sonographer:
1.2.1 Communicates with the patient in a manner appropriate to the patient's ability to understand. Presents explanations and instructions in a manner that can be easily understood by the patient and other healthcare providers.
1.2.2 Explains the examination and associated procedures to the patient and responds to patient questions and concerns.
1.2.3 Refers specific diagnostic, treatment, or prognosis questions to the appropriate physician or healthcare professional.

STANDARD – ANALYSIS AND DETERMINATION OF PROTOCOL FOR THE DIAGNOSTIC EXAMINATION:
1.3 The most appropriate protocol seeks to optimize patient safety and comfort, diagnostic quality, and efficient use of resources, while achieving the diagnostic objective of the examination. The diagnostic medical sonographer:
1.3.1 Integrates medical history, previous studies, and current symptoms in determining the appropriate diagnostic protocol and tailoring the examination to the needs of the patient.
1.3.2 Performs the examination under appropriate supervision, as defined by the procedure.
1.3.3 Uses professional judgment to adapt the protocol and consults appropriate medical personnel, when necessary, to optimize examination results.
1.3.4 Confers with the supervising physician, when appropriate, to determine if intravenous contrast is necessary to enhance image quality and obtain additional diagnostic information.
1.3.5 With appropriate education and training, uses proper technique for intravenous line insertion and administers intravenous contrast according to facility protocol.

STANDARD – IMPLEMENTATION OF THE PROTOCOL:
1.4 Quality patient care is provided through the safe and accurate implementation of a deliberate protocol. The diagnostic medical sonographer:
1.4.1 Implements a protocol that falls within established procedures.
1.4.2 Elicits the cooperation of the patient to carry out the protocol.
1.4.3 Adapts the protocol according to the patient's disease process or condition.
1.4.4 Adapts the protocol, as required, according to the physical circumstances under which the examination must be performed (e.g., operating room, sonography laboratory, patient's bedside, emergency room, etc.).
1.4.5 Monitors the patient's physical and mental status.
1.4.6 Adapts the protocol according to changes in the patient's clinical status during the examination.
1.4.7 Administers first aid or provides life support in emergency situations.
1.4.8 Performs basic patient care tasks, as needed.
1.4.9 Recognizes sonographic characteristics of normal and abnormal tissues, structures, and blood flow; adapts protocol as appropriate to further assess findings; adjusts
scanning technique to optimize image quality and diagnostic information.
1.4.10 Analyzes sonographic findings throughout the course of the examination so that a comprehensive examination is completed and sufficient data is provided to the supervising physician to direct patient management and render a final interpretation.
1.4.11 Performs measurements and calculations according to facility protocol.

STANDARD – EVALUATION OF THE DIAGNOSTIC EXAMINATION RESULTS:
1.5 Careful evaluation of examination results in the context of the protocol is important to determine whether the goals have been met. The diagnostic medical sonographer:
1.5.1 Establishes that the examination, as performed, complies with applicable protocols and guidelines.
1.5.2 Identifies and documents any limitations to the examination.
1.5.3 Initiates additional scanning techniques or procedures (e.g., administering contrast agents) when indicated.
1.5.4 Notifies supervising physician when immediate medical attention is necessary, based on examination findings and patient condition.

STANDARD – DOCUMENTATION:
1.6 Clear and precise documentation is necessary for continuity of care, accuracy of care, and quality assurance. The diagnostic medical sonographer:
1.6.1 Provides timely, accurate, concise, and complete documentation.
1.6.2 Provides an oral or written summary of findings to the supervising physician.

SECTION 2

STANDARD – IMPLEMENT QUALITY IMPROVEMENT PROGRAMS:
2.1 Participation in quality improvement programs is imperative. The diagnostic medical sonographer:
2.1.1 Maintains a safe environment for patients and staff.
2.1.2 Performs quality improvement procedures to determine that equipment operates at optimal levels and to promote patient safety.
2.1.3 Participates in quality improvement programs that evaluate technical quality of images, completeness of examinations, and adherence to protocols.
2.1.4 Compares facility quality improvement standards to external metrics, such as accreditation criteria, evidence based literature, or accepted guidelines.

STANDARD – QUALITY OF CARE:
2.2 All patients expect and deserve optimal care. The diagnostic medical sonographer:
2.2.1 Works in partnership with other healthcare professionals.
2.2.2 Reports adverse events.

SECTION 3

STANDARD – SELF-ASSESSMENT:
3.1 Self-assessment is an essential component in professional growth and development. Self-assessment involves evaluation of personal performance, knowledge, and skills.
3.1.1 Recognizes strengths and uses them to benefit patients, coworkers, and the profession.
3.1.2 Recognizes weaknesses and limitations and performs procedures only after receiving appropriate education and supervised clinical experience in any deficient
areas.

**STANDARD – EDUCATION:**
3.2 Advancements in medical science and technology occur very rapidly, requiring an on-going commitment to professional education. The diagnostic medical sonographer:
3.2.1 Obtains and maintains appropriate professional certification/credential in areas of clinical practice.
3.2.2 Recognizes and takes advantage of opportunities for educational and professional growth.

**STANDARD – COLLABORATION:**
3.3 Quality patient care is provided when all members of the healthcare team communicate and collaborate efficiently. The diagnostic medical sonographer:
3.3.1 Promotes a positive and collaborative atmosphere with members of the healthcare team.
3.3.2 Communicates effectively with members of the healthcare team regarding the welfare of the patient.
3.3.3 Shares knowledge and expertise with colleagues, patients, students, and members of the healthcare team.

**SECTION 4**

**STANDARD – ETHICS:**
4.1 All decisions made and actions taken on behalf of the patient adhere to ethical standards. The diagnostic medical sonographer:
4.1.1 Adheres to accepted professional ethical standards.
4.1.2 Is accountable for professional judgments and decisions.
4.1.3 Provides patient care with equal respect for all.
4.1.4 Respects and promotes patient rights, provides patient care with respect for patient dignity and needs, and acts as a patient advocate.
4.1.5 Does not perform sonographic procedures without a medical indication, except in educational activities.
4.1.6 Adheres to this scope of practice and other related professional documents.
APPENDIX A. GLOSSARY

For purposes of this document, the following definition of terms applies:

**ALARA**: an acronym for *A s L o w A s R e a s o n a b l y A c h i e v a b l e*, the fundamental principle for the safe use of diagnostic medical ultrasound is to use the lowest output power and the shortest scan time consistent with acquiring the required diagnostic information.

**Certification**: Designates that an individual has demonstrated through successful completion of a specialty certification examination the requisite knowledge, skills, and competencies and met other requirements established by a sonography credentialing organization. Certification also is intended to measure or enhance continued competence through recertification or renewal requirements.

**Credential**: Means the recognition awarded to an individual who has met the initial (and continuing) knowledge, skills, and competencies requirements of a sonography credentialing organization.

**Education**: The process undertaken to gain knowledge of facts, principles, and concepts. Education encourages problem solving, critical thinking, and application of the facts, principles, and concepts learned.

**Examination**: One or more sonographic or related procedures performed to obtain diagnostic information that aids in the verification of health or identification of disease or abnormality.

**Interpreting Physician**: The physician (e.g., radiologist, cardiologist, gynecologist, obstetrician, vascular surgeon, etc.) who evaluates the results of the diagnostic examination and provides the final report of the findings that is included in the patient’s medical record.

**Procedure**: A specific action or course of action to obtain specific diagnostic information; often associated with a reimbursement procedure code.

**Protocol**: A written, standardized series of steps that are used to acquire data when performing a diagnostic sonographic examination and its associated procedures.

**Referring Physician**: A physician who orders a diagnostic examination or refers the patient to a specialized facility for a diagnostic examination. In some clinical environments, the referring and supervising physician may be the same person.

**Sonography Credentialing Organization**: An organization that is accredited by National Commission of Certifying Agencies (NCCA) or the American National Standards Institute - International Organization for Standardization (ANSI – ISO) that awards sonography credentials upon successful completion of competency-based certification examination(s). Also known as a sonography “registry.”

**Supervising Physician**: A physician who provides overall medical direction of the sonographer but whose physical presence may not necessarily be required during the performance of a diagnostic examination. The supervising physician is available to review examination procedures and to offer direction and feedback. In some clinical environments, the supervising and interpreting physician may be the same person.

**Training**: The successful completion of didactic and clinical education necessary to properly perform a procedure in accordance with accepted practice standards. While closely related to education, training is undertaken to gain a specific skill.
APPENDIX I

While we have attempted to provide you with a comprehensive departmental handbook, it does not stand alone. Important University-wide policies, including the Code of Conduct and Student Sexual Misconduct Policy, along with information on various University services, can be found on the Thomas Jefferson University Student Handbook website at www.jefferson.edu/handbook. Additionally, important information on the academic policies and procedures within the Jefferson College of Health Professions can be found on the JCHP home webpage.

All Jefferson College of Health Professions (JCHP) & University Policies are found in the JCHP student handbook located at the following link: www.jefferson.edu/handbook

Please note the following is an example of the various policies found at www.jefferson.edu/handbook. Each student will be responsible for maintaining his/her knowledge of the information contained in the Academic Policies and Clinical Education Handbook, as well as the Jefferson College of Health Professions Catalog, and Jefferson College of Health Professions Student Handbook

University Policies

- Campus Violence Policy
- Code of Conduct/Students Rights, Freedoms and Responsibilities
- Confidentiality of Student Records
- Disability Accommodations
- Drug and Alcohol Policy
- Diversity Statement
- Emergency Preparedness
- Flu Vaccination Policy
- Health Insurance Policy
- Occupational Exposure to Blood and Body Fluids
- Peer-To-Peer File Sharing on University Networks
- Policy on Equal Opportunity; Policy Prohibiting Sexual Harassment, Policy on Other Forms Of Harassment; Policy Prohibiting Retaliation
- JEFFAlert Emergency Notification System
- Student Religious Observance Policy
- Required Background Check
- Social Media Policy
- Student Alcohol Policy
- Student Directory
- Student Grievance Procedure
- Student Identification Cards
- Student Sexual Misconduct Policy
- Tobacco Free Environment
- Updated Address Policy
- Use of College’s Name/University Logo
- Weapons Policy
- Weather Emergency Policy