



Student Handbook

for students in the

Bachelor of Science in Radiation Sciences Diagnostic Medical Sonography Program

The University of Iowa
Carver College of Medicine
Iowa City, IA

2025 – 2026 Academic Year

Preface:

This document is available electronically on the ICON site for Radiation Sciences Student Resources, Diagnostic Medical Sonography content.

Students of Diagnostic Medical Sonography Program are responsible for knowing and adhering to the policies and procedures contained in this Student Handbook. Students must comply with these policies as well as the Policies and Procedures Manual for students in the Bachelor of Science in Radiation Sciences and Bachelor of Science in Nuclear Medicine (hereafter known as the Degree manual), and the University of Iowa student policies [[Policies | Dean of Students - The University of Iowa \(uiowa.edu\)](#)]. Program faculty will consult these resources to ensure fair enforcement of the policies and procedures contained. If the student believes a policy has been enforced unfairly, the student should consult the grievance policy in the Degree Manual.

Policies and procedures in this handbook are subject to change. Students will be notified in writing about any policy changes and/or updates.

Note:

Except where otherwise noted:

- “Degree” will refer to the Bachelor of Science in Radiation Sciences degree program.
- “Program” will refer to the Diagnostic Medical Sonography Education Program.
- “Faculty” will refer to the Program Director, Radiation Sciences Educators, and designated adjunct instructors.
- “Administrative Director of Radiation Sciences” will refer to the Administrative Director of Baccalaureate degrees in Radiation Sciences.
- “Degree manual” will refer to the Policies & Procedures manual for Students in the Bachelor of Science Radiation Sciences and Bachelor of Science in Nuclear Medicine Technology.

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Program Administrative Information

Organization of Diagnostic Medical Sonography Program

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Organization and Sponsorship

The University of Iowa sponsors the Diagnostic Medical Sonography Program as a track in the Radiation Sciences Baccalaureate Degree. The program is within the organizational structure of the University of Iowa Health Care, Carver College of Medicine, Department of Radiology. Dr. Bruno Policeni, MD (bruno-policeni@uiowa.edu) is the Chair of the Department of Radiology. Greg Lehmann is the Clinical Department Administrator.

Dr. Francisco Donato (francisco-donato@uiowa.edu) and Dr. Ramzi El Accaoui (ramzi-elaccaoui@uiowa.edu) are Medical Advisors to the program.

The program accepts up to 20 students per year.

The General-Vascular Track has substantial clinical rotations within University of Iowa Health Care University Campus Departments of Radiology, Obstetrics and Gynecology, and the Heart and Vascular Center (Vascular Lab), as well as other University of Iowa Health Care locations. There are rotations to affiliate clinical sites outside of University of Iowa Health Care.

The Cardiac-Vascular Track has substantial clinical rotations within University of Iowa Health Care in the Heart and Vascular Center (Vascular Lab and Echocardiography Lab), and Department of Radiology, as well as other University of Iowa Health Care locations. There are rotations to affiliate clinical sites outside of University of Iowa Health Care.

Educational experiences include didactic course work, laboratory activities, clinical education, and independent study.

Program Description

Each of the radiation sciences diagnostic medical sonography (DMS) degree tracks consist of two professional concentrations — **DMS in general and vascular sonography** or **DMS in cardiac and vascular sonography**. Each of these three-year programs is selective and competitive; acceptance is not guaranteed. Students must satisfy all UI admission requirements, complete all prerequisites, and be accepted into the diagnostic medical sonography professional program following an application and selection process.

Diagnostic Medical Sonography in General and Vascular Sonography

The diagnostic medical sonography program in general and vascular sonography provides a multispecialty education in obstetrical, abdominal, pediatric, and vascular sonography (ultrasound imaging). Students learn about sonographic imaging and evaluation, hemodynamics and Doppler evaluation, sonography equipment, sectional anatomy, pathology, patient care, medical ethics, and quality assurance methods. They become proficient in using sonographic imaging equipment and in performing obstetrical and gynecological, abdominal, pediatric, and vascular sonographic procedures, including invasive procedures, emergency exams, and 3-D imaging. They also participate in supervised clinical education. Elective coursework is available in breast sonography and fetal cardiac sonography.

Upon completing the program, graduates are eligible to apply for the national certification exams in diagnostic medical sonography in the specialty areas of obstetrics and gynecology, abdomen, and vascular technology.

Students typically apply to this three-year program during their first year and begin it in fall of their sophomore year. Application deadline is January 15. Up to twelve students are accepted into this track each year.

Diagnostic Medical Sonography in Cardiac and Vascular Sonography

The diagnostic medical sonography program in cardiac and vascular sonography provides a multispecialty education in cardiac (echocardiography) and vascular sonography (ultrasound imaging). Students learn about sonographic imaging and evaluation, hemodynamics and Doppler evaluation, sonography equipment, sectional anatomy, pathology, patient care, medical ethics, and quality assurance methods. They become proficient in using sonographic imaging equipment and in performing cardiac and vascular sonographic procedures, including invasive procedures, emergency exams,

and 3-D imaging. They also participate in supervised clinical education. Elective coursework and lab available in pediatric cardiac sonography and fetal cardiac sonography.

Upon completing the program, graduates are eligible to apply for the national certification exams in diagnostic medical sonography in the specialty areas of cardiac (adult echocardiography) and vascular technology.

Students typically apply to this three-year program during their first year and begin it in fall of their sophomore year. Application deadline is January 15. Up to eight students are accepted into this track each year.

Advisory Committee

CAAHEP Standards require an advisory committee, which is representative of at least each of the communities of interest named in these Standards, be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change.

Representatives

- Program Director, Diagnostic Medical Sonography Program (Committee Chair)
- Clinical Coordinators, Diagnostic Medical Sonography Program
- Radiation Sciences Educators, Diagnostic Medical Sonography Program
- Vice Chair for Education, Department of Radiology
- Medical Advisor, Diagnostic Medical Sonography Program, General-Vascular Track
- Medical Advisor, Diagnostic Medical Sonography Program, Cardiac-Vascular Track
- Administrative Director of Baccalaureate degrees in Radiation Sciences
- Director of Student Affairs, Baccalaureate Degree in Radiation Sciences
- Clinical Department Administrator, Department of Radiology
- Technical Director, Department of Radiology
- Clinical Supervisor or Preceptor, Department of Radiology – Ultrasound Section
- Clinical Supervisor or Preceptor, Department of OB/GYN – Ultrasound Section
- Clinical Supervisor or Preceptor, Heart and Vascular Center – Peripheral Vascular Lab
- Clinical Supervisor or Preceptor, Heart and Vascular Center – Echocardiography Lab
- Clinical Affiliate Representative
- Student Representative
- Graduate Representative
- Community/Public Representative

Ad hoc members invited as needed based on topics of discussion.

Mission Statement, Goals & Learning Outcomes

Mission Statement

The mission of the University of Iowa Diagnostic Medical Sonography Program is to educate students in the art and science of diagnostic medical sonography and to prepare competent entry-level abdominal-extended, obstetrical and gynecological, adult cardiac and vascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

The program's mission is in concert with the Carver College of Medicine mission to inspire and educate world class healthcare providers and scientists for the people of Iowa and our global community.

Goals & Student Learning Outcomes

- To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the abdominal-extended, obstetrical and gynecological, and vascular concentrations.
- To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the adult cardiac and vascular concentrations.
- To prepare sonography professionals that function as a compassionate and competent part of the healthcare team and represent the commitment to excellence that the program strives to achieve.
- To prepare sonography professionals that demonstrate critical thinking, professional decision making, and desire for professional life-long learning.

Diagnostic Medical Sonography Program Objectives

Upon completion of the Diagnostic Medical Sonography Program, the student will be able to perform the following:

1. Identify and describe sonographic terminology and use that terminology in an effective manner.
2. Identify and perform appropriate nursing care procedures and techniques used in the general care of patients in various states of health and in various conditions demanding special needs.
3. Demonstrate knowledge of the physical principles of diagnostic sonography and their applications to the clinical environment.
4. Manipulate the technical controls on the equipment used in the ultrasound department to produce an optimum image for diagnostic purposes.
5. Archive images necessary for a diagnostic ultrasound examination.
6. Employ the use of medical terminology and abbreviations pertinent to diagnostic medical sonography.
7. Identify the biological effects of diagnostic ultrasound and take the necessary precautions to avoid excessive exposure of ultrasound on patients.
8. Demonstrate the ability to mentally transform gross anatomy to sectional anatomy relative to diagnostic ultrasound.
9. Demonstrate the skills necessary to perform an ultrasound examination of any abdominal and pelvic organs, the gravid uterus, superficial structures, peripheral vascular system and heart, to include Doppler studies, routinely examined in a diagnostic ultrasound department as applicable to the student's curriculum track.
10. Identify normal and pathological conditions on a sonogram of the abdominal and pelvic organs, the gravid uterus, superficial structures, peripheral vascular system and heart routinely examined in a diagnostic ultrasound department as applicable to the student's curriculum track.
11. Assist the attending sonologist in the differential diagnosis process of a pathological entity.
12. Demonstrate the ability to maintain a sterile field while assisting with an invasive ultrasound study.
13. Demonstrate the appropriate skills in performing a quality assurance test utilizing a phantom.
14. Conduct oneself in a courteous and professional manner while in the hospital environment.

Contacts & Communications

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Academic Calendar 2025 - 2026

Some university calendar dates may change; see [Dates and Deadlines](#) on the Office of the Registrar website for the most up-to-date University of Iowa academic calendar. Radiation Sciences and Diagnostic Medical Sonography Education date changes will be communicated to you via email.

2025 Fall Semester

Aug. 25	Opening of classes & clinic for Sophomores & Seniors
Sept. 1	University holiday, no classes or clinic
Nov. 22-Nov. 30	Fall Break, no classes or clinic
Dec. 1	Classes & clinic resume
Dec. 15-19	Finals week
Dec. 20-Jan. 4	Winter break, no classes or clinic

2026 Spring Semester

Dec. 20-Jan 4	Winter break, no classes or clinic
Jan. 5	Opening of clinic for Juniors & Seniors
Jan. 5-Jan. 18	Clinic only, no classes.
Jan. 19	University holiday, no classes or clinic
Jan. 20	Opening of classes & clinic
Mar. 14-22	Spring break, no class or clinic
Mar. 23	Class & clinic resume
May 11-15	Finals week
May 16	Commencement
May 16-31	Summer break one, no class or clinic

2026 Summer Semester

June 1	Opening of clinic for Juniors (no clinic or classes for Sophomores)
June 1-14	Clinic only, no classes
June 15	Opening of classes & clinic
July 3	University holiday, no classes or clinic
Aug. 3-7	Finals week
Aug. 8-23	Summer break two, no class or clinic
Aug. 24	Opening of class & clinic

Accreditation

The Diagnostic Medical Sonography Program is accredited by the [Commission on Accreditation of Allied Health Education Programs \(CAAHEP\)](http://www.caahep.org) (www.caahep.org) upon the recommendation of the [Joint Review Committee on Education in Diagnostic Medical Sonography \(JRCDFS\)](http://www.jrcdms.org) (www.jrcdms.org). (CAAHEP, 9355 - 113th St. N, #7709, Seminole, FL 33775; (727) 210-2350) (JRCDFS, 6021 University Boulevard Suite 500 Ellicott City, MD 21043; (443) 973-3251)

Advanced Placement

The Diagnostic Medical Sonography program does not allow advanced placement within the program.

Advising and Counseling

1. The Program Director, Clinical Coordinator, and Program Faculty will serve as advisors for students regarding Program specific matters related to academic and clinical curriculum, the Policies and Procedures Manual, this Student Handbook, and all other matters outside the responsibilities of the Radiation Sciences Office of Student Affairs (see #4).
2. Students may seek advising services from Program Faculty not assigned to them if needed.
3. Students may request counseling meetings as needed.
4. The official University of Iowa academic advisor for students in the Baccalaureate Degree in Radiation Sciences (BSRS) is assigned by the Office of Student Affairs, Radiation Sciences. This academic advisor will assist the student with matters such as course registration, general education courses and degree completion. Refer to the Degree manual 2024-2025 for more details.
5. Career Guidance is provided by the Pomerantz Career Center
 - [Pomerantz Career Center | The University of Iowa \(uiowa.edu\)](http://uiowa.edu)
6. The University of Iowa Counseling Service is also available to students any time they wish to utilize it. Information can be obtained:
 - [University Counseling Service | The University of Iowa \(uiowa.edu\)](http://uiowa.edu)

Classroom and Study Locations

- Classrooms:** The program uses the Radiology Classroom, SE602; Holland Classroom, C763 GH and other classrooms when necessary. The individual course syllabi will specify where class is held.
- Labs:** Laboratory activities will be held in the Holland Classroom, C763 GH, and other clinical lab areas when necessary. The individual course syllabi and lab schedules will specify where lab is held.
- Study areas:** The following areas are available for independent study time:
Hardin Library, Program Lounge, Radiology Library, and Holland Classroom C763 GH (when class is not in session). Computers and other educational resources are available in most of these areas.

Clinical Internship Grading

There are five clinical internship courses within the program. All required course documentation for the semester must be appropriately completed on or before the last day of the clinical internship course.

Required course documentation varies per internship but may include:

- Clinical rotation checklists and learning modules
- Performance appraisals
- Clinical competencies
- Professional development
- Exam log records
- Time log records
- Lab proficiencies

Students must earn a C or higher in each individual component of the final internship grade.

If a student earns below a C in an individual component of their clinical internship grade, they will receive an F for that component of their clinical internship grade.

If a student fails an individual component of the clinical internship's semester grading criteria, they will be subject to the Academic Standards policy. See Degree manual.

Grading scale for Clinical Internships can be found in the Rad Sci Policies and Procedures Manual.

Grading Components (by internship):

Clinical Internship I	Clinical Internship II	Clinical Internship III	Clinical Internship IV	Clinical Internship V
Checklists & Learning Modules (67%)	Checklists & Learning Modules (10%)	Checklists & Learning Modules (10%)	Checklists & Learning Modules (10%)	Checklists & Learning Modules (10%)
Performance Appraisal Gade (33%)	Performance Appraisal Gade (40%)	Performance Appraisal Gade (40%)	Performance Appraisal Gade (40%)	Performance Appraisal Gade (40%)
	Clinical Competency (40%)	Clinical Competency (40%)	Clinical Competency (40%)	Clinical Competency (40%)
	Professional Development (10%)	Professional Development (10%)	Professional Development (10%)	Professional Development (10%)

*Exam Log Records: not a graded component but a minimum number is required for Clinical Internship 5 and Program Completion (terminal semester).

Clinical Rotation Checklists & Learning Modules:

Clinical rotation checklists and learning modules are a way of evaluating the student's progress through the educational program. They are designed to evaluate the student's knowledge of the clinical environment and safety policies, equipment, clinical knowledge and skills, and to broaden their understanding of extra-departmental areas.

1. Each student will have access to the clinical rotation checklists and learning modules before the beginning of the clinical rotations.
2. The designated staff sonographers or instructors will assess the student.
3. Clinical rotation checklists and learning modules will be completed toward the end of their described rotation period.
4. Any clinical rotation checklists and learning modules not completed by the due date will be considered incomplete.
5. If a student misses clinic due to an excused absence, the student will have two (2) weeks to complete the rotation checklists and learning modules (only if arrangements have been made with the clinical coordinator prior to the due date).
6. The student is responsible for contacting the clinical coordinator to arrange to complete any missed clinical rotation checklists and learning modules.
7. Clinical rotation checklists and learning modules **not** completed on time will receive a 50% grade reduction.
8. Clinical rotation checklists and learning modules must be completed in sequence. (i.e., first rotation completed before doing second rotation)
9. **All** clinical rotation checklists and learning modules must be completed to complete the program.
10. The clinical rotation checklists and learning modules grades are based on total points for the semester.

***Note:** To attain a Clinical Verification Form upon graduation in Pediatric Sonography, Pediatric Cardiac Sonography or Breast Sonography the student must pass the corresponding didactic course *and* complete all the associated clinical rotation checklists, learning modules, required and elective competencies. The Clinical Verification Form is only active for 1 year.

Performance Appraisal

Performance Appraisals are a way to evaluate the student's affective domain. This includes but is not limited to quality and quantity of work, communication, initiative, judgment, critical

thinking, decision-making, patient care, altruism, reliability, responsibility, attitude, adaptability, relationships with others, honor, and integrity.

Assessment tools include Performance Evaluations and Performance Appraisal forms. Examples are provided in the Performance Evaluation Form and Performance Appraisal Form module in ICON.

1. Performance Evaluations will be completed by the staff sonographers for each clinical rotation.
2. It is the student's responsibility to initiate evaluation each rotation and confirming evaluation has been completed.
3. **Evaluation forms must be sent to ALL designated sonographers on the rotation list.**
4. Staff sonographers may provide immediate feedback, at any time, by contacting the Radiation Sciences Educators or Program Director regarding student performance evaluation.
 - Immediate feedback is beneficial in providing effective and timely feedback to the student to maximize their clinical education.
 - Immediate feedback may come in many forms such as, but not limited to:
 - Email
 - Phone call
 - Face-to-face meetings
5. Performance Appraisal grade will be based on information gathered from clinical Performance Evaluation forms, performance in clinical internship rotations, personal observations, and interactions with the student.
6. Instructors may reduce a student's Performance Appraisal grade if the student is not meeting program expectations.
7. Students who continue to not meet program expectations may be subject to an overall Clinical Internship grade reduction of one grade level (ie., A to B).
8. Attendance may affect the Clinical Internship grade. See Attendance policy located in the Degree Manual.

Clinical Competency

Clinical competency tests are a method of verification of accuracy in clinical skills routinely performed during sonographic and physiologic vascular examinations. This method of verification is in the form of a checklist. The checklist provides every step necessary to perform a sonogram accurately and effectively. There are two forms of competencies, basic and advanced.

1. **Basic Competencies:** The goal of the basic competencies and their signature is to assess the student's knowledge of:
 - Normal anatomy
 - Protocols
 - Knobology

- **Pathology does not need to be accurately documented.** If there is a large degree of pathology and the student's knowledge cannot be assessed, it is okay for the assessing sonographer to terminate the competency.
 - This does not mean the competency was failed or needs to be marked as a repeat.
 - It is discontinued due to a technically difficult exam beyond the student's control.
 - The competency will begin anew next attempt.
- 2. **Advanced Competencies:** The goal of the advanced competencies and their signature is to assess the student's ability to recognize and document pathology accurately.
 - The assessing sonographer may terminate a competency exam if the degree of pathology is so great that an accurate assessment cannot be done.
 - For example, if the patient has too much adipose tissue so the anatomy and vasculature cannot be seen.

Clinical Instructors eligible to perform competencies with students must meet the following:

- Must be certified at least 6 months in the specialty area being evaluated.
- Must have at least 6 months of experience in the specialty area being evaluated.
- Must view the Evaluation of Clinical Competency presentation explaining the assessment process.

Process to Complete a Clinical Competency:

1. Each student will be given access to the latest competency forms needed to satisfy the set standard established by the University of Iowa Diagnostic Medical Sonography Program.
 - These forms are located in the comps binder in the ICON clinical course and E-value.
2. After didactic instruction and adequate clinical practice, and when the student feels able to pass the clinical competency examination, they will notify the sonographer **PRIOR** to beginning the exam.
3. For comps specific to a disease process (ex. Cardiac-aortic insufficiency), students may ask for a competency after the exam **only if it is a new finding**.
4. The exam must be performed under the **direct** supervision of the sonographer who grades the student's performance at that time on the competency checklist via Evalue.
5. Clinical competency exams will be graded as pass/fail.

- Any error which may cause harm to the patient stops the testing at that point with a failing grade for the attempt.
 - A failing grade may also result from not meeting the expectations listed on the clinical competency form.
6. If a student fails the competency, they must send the competency via Evalute to be completed by the supervising sonographer.
 7. Failure to follow these policies will result in disciplinary actions and academic probation.
 8. Clinical competency exam re-testing may be attempted after the student has reviewed instructional material related to the failed competency exam.
 - The repeat exam may not be on the same day as the original competency attempt.
 - A student may have a maximum of three (3) attempts to pass a comp.
 - If a student does not pass after the third attempt, significant disciplinary action may be taken. No fourth attempts are allowed.
 9. All clinical competencies requirements must be completed to complete the program.

*Changes to assigned clinical rotations to complete clinical competency exams will be evaluated on a case-by-case base. Students who feel they need a schedule adjustment in order to obtain a clinical competency must submit this request, in writing, to the program director and clinical coordinator. Requests to adjust rotations to complete clinical competency exams may negatively impact the Performance Appraisal grade as the student is not meeting program expectations.

Clinical Competency Grading:

The Clinical Competency grade is based on the successful completion of clinical competency exams with the grading criteria identified on each Clinical Internship course syllabus.

A general plan for clinical competency completion at a grade level of an "A" would include approximately:

- 6 or more exams for Clinical Internship II
- 23 or more exams for Clinical Internship III
- 40 or more exams for Clinical Internship IV
- All required exams and 9 or more optional or elective competencies for Clinical Internship V

*This criterion is a general guideline and is subject to change. A more detailed criterion can be found in the course syllabus.

Professional Development

The purpose of Professional Development is to provide students the opportunity to learn and apply new knowledge and skills essential for their successful career. These activities support the program goal to prepare sonography professionals that demonstrate critical thinking, professional decision making, and desire for professional life-long learning.

Professional Development skills are evaluated by:

- Attending the assigned Professional Development learning sessions during the semester
- Completing the Professional Development assignments

Professional Development learning sessions are held during Clinical Internships II – V. Students will attend these learning sessions in person. If a Professional Development learning session is scheduled during a students' clinical internship hours, the student will be excused from clinic to attend.

Exam Log Records

The purpose of the Exam Log Record is to monitor the student's progress, initiative, and exam experience throughout the program. Exam Log records are located in E*Value.

1. To meet graduation requirements, students are required to document a minimum number of exams for each applicable learning concentration based on the educational track and are as follows:
 - General:
 - 150 abdomen exams
 - 75 OB exams
 - 75 GYN exams
 - Vascular: 170 exams
 - Adult cardiac: 250 exams
2. Failure to maintain and submit an accurate log record will result in an overall clinical grade reduction by one-half a letter grade for that semester (i.e., A to A-).
3. Failure to document the required number of exams by the end of the program will result in failure of the Clinical Internship course and failure to meet the graduation requirements of the program.

How to determine and record the level of case/procedure involvement:

1. Observed:

- Simply watching the ultrasound exam being performed (**never touching the transducer**). For example, the observer could have helped by typing the patient's name in and getting the patient in the room & ready for the sonographer or sonologist who will be performing the exam.
2. Assisted:
- Responsible and accountable for doing **part** of the exam. Sharing part of the exam responsibility with the sonographer or sonologist. For example: Taking images of carotid, echo, biliary, pancreas, uterus, and fetal spine or doing the measurements; helping to complete **part** of any exam.
3. Independent:
- Responsible and accountable for completing the **entire** exam, then showing it to the sonographer who is overseeing the case. This does not mean you have completed the competency. You may perform an entire exam while being observed by the sonographer prior to completing a competency.
 - Most exams you do after completing the competency would be at the level of performing.

How to correctly record types of exams on the Exam Log Record.

All exams are recorded by exam type based on ARDMS guidelines. Record exams on the following logs:

Abdomen Log *	GYN Log	OB Log	Breast Log	Vascular Log
1. Abdominal 2D exams 2. Elastography 3. Invasive abdominal procedures 4. Small parts (except Breast) 5. MSK 6. Neonatal heads 7. Spines 8. Other miscellaneous exams (including Pediatrics)	1. All gyne 2D 2. Doppler and related invasive procedures (SIS, etc.)	1. All OB 2D 2. Doppler (placenta and umbilical cord Doppler) 3. Invasive procedures (fetal blood sampling/transfusions)	1. All breast 2D 2. Doppler 3. Invasive procedure exams	1. All physiologic testing 2. Duplex peripheral vascular (arterial and venous) 3. Carotids 4. Aorta 5. Abdominal Doppler (liver, renal, mesenteric, etc.)

***Note: Do NOT include abdominal vascular and Doppler studies. They will be recorded in the Vascular Log Record)**

How to determine what constitutes a 'procedure' or case on the Exam Log Record:

1. If it is considered standard of care to order a unilateral exam and it is ordered unilateral then that is considered one procedure.
2. If the exam is then performed as a bilateral exam, it can be considered two procedures.

Examples:**Abdominal and Abdominal Doppler Exams**

- Renal – One procedure (because it is never standard of care to do only one kidney)
- Renal with Doppler for renal artery stenosis (RAS) – Two procedures
- Renal exam is one procedure on the Abdomen Log Record
- Renal Doppler is one procedure on the Vascular Log Record
- RUQ – One procedure on the Abdomen Log Record
- RUQ with Doppler – Two procedures
- RUQ is recorded as one on the Abdomen Log Record
- Liver Doppler as one on the Vascular Log Record
- A total abdomen exam* *could* include the following:
 - RUQ – One procedure on the Abdomen Log Record
 - Renal – One procedure on the Abdomen Log Record
 - Aorta – One procedure on the Vascular Log Record
 - Fluid localization – One procedure on Abdomen Log Record

*This may vary from lab to lab and from patient to patient

Vascular Exams

- Aorta – One vascular procedure on the Vascular Log Record
- Carotid – One procedure (because it is never standard of care to do only one side) on the Vascular Log Record
- Unilateral upper or lower extremity venous – One procedure on the Vascular Log Record
- Bilateral lower extremity venous duplex – Two procedures on the Vascular Log Record

Cardiac Exams

- Standard echo – One procedure on the Cardiac Log Record
- Standard echo with Definity/Optison – One procedure on the Cardiac Log Record
- Standard echo with Agitated Saline – Two procedures on the Cardiac Log Record as there are additional, specific imaging and techniques required and these are somewhat less common

Gyn Exams

- Transvaginal pelvis exam only – One procedure on the Gyn Log Record
- Transabdominal & transvaginal pelvis exam – Two procedures on the Gyn Log Record
- Pelvis with SIS – Two procedures
- Pelvis exam is recorded as one on the Gyn Log Record
- SIS is recorded as one on the Gyn Log Record

OB Exams

- OB with Cervical Length – Two procedures
- OB exam is recorded as one on the OB Log Record
- Cervical Length is recorded as one on the OB Log Record
- Twins – Two procedures - each twin is recorded on the OB Log Record as one
 - Write a note on the log record indicating they were twins, that way there is a record of experience with twin pregnancies.

Breast Exams

- Unilateral breast – One procedure on the Breast Log Record
- Bilateral breasts – Two procedures on the Breast Log Record

Competency- Based Clinical Evaluation System

The clinical education segment of the Diagnostic Medical Sonography Program at the University of Iowa is based on a competency approach. The skills and abilities of the students must meet predetermined expectations stated in the form of clinical rotation checklists and learning modules and clinical competency exams. All clinical rotation checklists, learning modules and competency exams must be successfully completed for the student to complete the program. The clinical evaluation system is designed to ensure that students are able to perform in all facets of Diagnostic Medical Sonography at competent levels before entering into their individual careers in the health profession.

To evaluate the competency of clinical performance of a student necessitates the use of multiple methods of instruction and evaluation. The following list of methods and their definitions will be used in conjunction with the Clinical Curriculum policies and documents provided in the Diagnostic Medical Sonography Clinical Notebook to determine the competency level of the student in the clinical environment.

- A. Laboratory - The student will attend a demonstration lab conducted by the registered staff sonographer or faculty. In addition, the registered staff sonographers and faculty will work with the student on phantoms, models or patients in a laboratory-learning environment to help students develop scanning skills and learn exam protocols. Laboratory objectives must be successfully completed and students will receive a grade for lab courses.
- B. Performance Observation - The student will be observed and instructed by a registered sonographer or faculty in the clinical ultrasound labs performing procedures on patients and interacting with fellow healthcare providers. Students will receive feedback on their performance and will be evaluated periodically with the standardized Performance Evaluation form. The Performance Evaluation will be a component of the student's clinical internship course grade.
- C. Clinical Rotation Checklists and Learning Modules - These learning activities are provided for each clinical rotation. They provide the student with guidance as to the clinical expectations during the clinical rotation. Checklists and Learning Modules will be assessed at the completion of each rotation. The Clinical Rotation Checklists and Learning Modules will be a component of the student's clinical internship course grade.
- D. Exam Signature - After successfully completing the didactic and laboratory portions of an exam, the student may obtain a registered staff signature through eValue indicating

the student's successful and independent completion of an exam. If the supervising sonographer is not credentialed/registered in the specific exam performed, the clinical supervisor will need to be listed as a co-signature in eValue (based on JRCDS guidelines). It is the student's responsibility to validate the sonographer's registry status by checking the list provided by the program.

- E. Exam Competency - Once the student has obtained the required signature on any given exam and believes they can competently perform the exam, they will ask a designated registered sonographer or faculty to observe and evaluate that exam for competency. Documentation of the competency exam is through eValue. A designated number of clinical competencies must be completed during each clinical internship course, with all competencies completed by the end of the program. The Competency grade will be a component of the student's clinical internship course grade.
- F. Remedial Instruction – When a student is found to be lagging in clinical skills as determined by one of the methods listed above, the program faculty may provide additional resources or individual instruction activities to assist the student in gaining the required skills and understanding. It is the student's responsibility to seek out resources to meet the minimum requirements and expectations of the program curriculum.
- G. Remedial Competency – If a student is found to be lacking in clinical skills after having completed a clinical competency exam, an instructor or clinical faculty may report the need for the student to perform a remedial competency. This process is described in the remedial policy section of this handbook.

Curriculum

The curriculum is designed to prepare the students for the clinical environment, the performance of sonography examinations and competence in the profession. Courses and labs are sequenced to provide a foundation of knowledge in the core radiation sciences, then to build the sonography specific techniques and practices.

The sophomore year is primarily core radiation sciences courses, as well as Foundations of Sonography didactic course with lab. The students are oriented to clinical education in Diagnostic Medical Sonography Clinical Internship I.

The junior year is sequenced to provide the students with didactic instruction in normal sonographic anatomy, physiology and scanning techniques in all the specialty areas during the first semester. Laboratory courses are paired with the didactic courses and help facilitate the students' psychomotor skills of sonographic imaging and better prepare them for the hospital clinical experience. Didactic courses in the second semester primarily focus on pathological conditions. Clinical internships during the second semester allow the students to apply the didactic knowledge to the clinical setting. Upon completion of these courses, the students have developed the clinical skills necessary to assimilate the didactic material to clinical practice. The students may attempt clinical competency examinations and begin to work more independently in the clinical environment. The summer semester provides extensive clinical experience and the opportunity for elective courses in other sonography specialties.

The senior year includes the highest level of didactic coursework to include advanced and cutting-edge sonography material, research opportunities, basics of management and healthcare administrative concepts and advance clinical education.

SOPHOMORE YEAR - FALL SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSP: 2110 Pathology for Radiation Sciences	30		2
RSP:2120 Patient Care for Radiation Sciences	45		3
RSCI:4110 Vascular Anatomy	45		3
RSMS:3110 Foundations of Sonography	45		3
RSMS:3111 Foundations of Sonography Lab		15	1
RSMS:3115 DMS Clinical Internship I	128		1
Subtotal			13

* Recommended, not required

SOPHOMORE YEAR–SPRING SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSP:3210 Medical Ethics & Law	30		2
RSCT:4100 Sectional Anatomy for Radiation Sci	45		3
RSCI:4130 ECG and Hemodynamics	45		3
RSMS:3230 Sonography Principles, Physics and Instrumentation	45		3
RSMS:3231 Sonography Principles, Physics and Instrumentation lab		15	1
Subtotal			13

General-Vascular Track

JUNIOR YEAR - FALL SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:3130 Obstetric & Gyn Sonography I	45		3
RSMS:3131 Obstetrical & Gyn Sonography I Lab		15	1
RSMS:3120 Abdominal Sonography I	45		3
RSMS:3121 Abdominal Sonography I Lab		15	1
RSMS:3140 Vascular Sonography I	45		3
RSMS:3141 Vascular Sonography I Lab		15	1
Subtotal			12

JUNIOR YEAR - SPRING SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:3250 Obstetric & Gyn Sonography II	45		3
RSMS:3240 Abdominal Sonography II	45		3
RSMS:3270 Vascular Sonography II	45		3
RSMS:3260 Breast Sonography (elective)	(30)		(2)
RSMS:3215 DMS Clinical Internship II	328		3
Subtotal			12-14

JUNIOR YEAR - SUMMER SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:3325 Abdominal Sonography II Lab		15	1
RSMS:3376 Vascular Sonography II Lab		15	1
RSMS:3300 Pediatric Sonography	45		3
RSMS:3315 DMS Clinical Internship III	328		3
Subtotal			8

SENIOR YEAR - FALL SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:4110 Advanced Sonography	45		3
RSMS:4111 Advanced Sonography Lab		15	1
RSP:4110 Research Methodologies in RS	45		3
RSMS:4115 DMS Clinical Internship IV	480		5
Subtotal			12

SENIOR YEAR - SPRING SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSP:3220 Radiation Sciences QM & HC Adm	30		2
RSRT:3220 Emotional Intelligence for HC Professionals	30		2
RSMS:4220 Multidisciplinary Capstone Seminar	45		3
RSMS:4215 DMS Clinical Internship V	432		5
*Fetal Cardiac Sonography (online elective)	45		3
Subtotal			12 - 15

Curriculum is subject to change

*6 clinical hours ~ 1 contact hour

Cardiac-Vascular Track

JUNIOR YEAR - FALL SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:3100 Cardiac Sonography I	45		3
RSMS:3101 Cardiac Sonography I Lab		30	2
RSMS:3150 Cardiac Physiology & Hemodynamics	45		3
RSMS:3140 Vascular Sonography I	45		3
RSMS:3141 Vascular Sonography I Lab		15	1
Subtotal			12

JUNIOR YEAR - SPRING SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:3205 Cardiac Sonography II	45		3
RSMS:3206 Cardiac Sonography II Lab		15	1
RSMS:3270 Vascular Sonography II	45		3
RSMS:3305 Pediatric Cardiac Sonography (elective)	(3)		(3)
RSMS:3306 Pediatric Cardiac Sonography Lab (elective)	(1)		(1)
RSMS:3215 DMS Clinical Internship II	328		3
Subtotal			10 -14

JUNIOR YEAR - SUMMER SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:3376 Vascular Sonography II Lab		15	1
RSMS:3315 DMS Clinical Internship III	328		3
Subtotal			4

SENIOR YEAR - FALL SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSMS:4110 Advanced Sonography	45		3
RSMS:4111 Advanced Sonography Lab		15	1
RSMS:4120 Advanced Cardiac Sonography	45		3
RSMS:4121 Advanced Cardiac Sonography Lab		15	1
RSP:4110 Research Methodologies in RS	45		3

RSMS:4115 DMS Clinical Internship IV	480		5
Subtotal			16

SENIOR YEAR - SPRING SEMESTER	Clock Hrs	Lab Hrs	Sem Hrs
RSP:3220 Radiation Sciences QM & HC Adm	30		2
RSRT:3220 Emotional Intelligence for HC Professionals	30		2
RSMS:4220 Multidisciplinary Capstone Seminar	45		3
RSMS:4215 DMS Clinical Internship V	432		5
*Fetal Cardiac Sonography (online elective)	45		3
Subtotal			12-15

Curriculum is subject to change

*6 clinical hours ~ 1 contact hour

Experiential Learning

The Diagnostic Medical Sonography program does not award credit for experiential learning.

Diagnostic Medical Sonography Program Track Transfer

Policy

Track transfers are available to students who meet the qualifications for the desired track and transfer deadlines. Students wishing to transfer must follow the procedures outlined in the policy.

Procedure

Students interested in transfer must complete the following:

1. Meet with their Radiation Sciences Academic Advisor to determine class and credit eligibility.
2. Meet with the DMS Program Director to discuss clinical requirements.
3. Request for transfer approval, via email, to the following:
 - Radiation Sciences Academic Advisor
 - Diagnostic Medical Sonography Program Director
4. The transfer process described above must be completed by the end of the RSMS:3115 DMS Clinical Internship I.
5. Students in poor academic standing, on programmatic probation or having disciplinary documentation are not eligible for a track transfer.

Mail, Personal Items and Program Lounge

Mail	Each student will be contacted by the Radiation Sciences Administrative Service Coordinator if they have hard-copy mail.
Personal Items	Students may keep their personal items (back packs, etc.) in the clinical areas. Refer to the Degree Manual for details on use of electronic devices.
Program Lounge:	There is a correspondence board the students may refer to for general postings.

There is a refrigerator and microwave in the Program Lounge available for student use.

Students in the Radiation Sciences Programs use the student lounge. The use of the student lounge is considered a privilege. It is the students' responsibility to keep the lounge clean. In the event that this responsibility is not taken seriously, all students using the lounge will be asked to develop a plan to maintain cleanliness and order.

Please adhere to the safety guidelines outlined on the door in terms of maximum occupancy and disinfecting.

Policy Awareness

Policy

This form will serve as verification that student has read and understands the Diagnostic Medical Sonography (DMS) Program Student Handbook for the Radiation Sciences Diagnostic Medical Sonography Program at the University of Iowa. Completing this form is an agreement to abide by the policies and procedures outlined in the DMS Student Handbook as well as all policies and procedures referenced in the Preface (see page 2). It serves as acknowledgement of the responsibility to adhere to the policies and procedures of the University of Iowa, University of Iowa Health Care, University of Iowa Department of Radiology, University of Iowa Radiation Sciences bachelor's degree, and the Radiation Sciences Diagnostic Medical Sonography Program.

Procedure

1. The Policies and Procedures Manual for students in the Bachelor of Science in Radiation Sciences and Nuclear Medicine and the Diagnostic Medical Sonography Program Student Handbook are available to students in the Radiation Sciences Information ICON course.
2. The Policies and Procedures Manual for students in the Bachelor of Science in Radiation Sciences and Nuclear Medicine and the Diagnostic Medical Sonography Program Student Handbook will be reviewed at student orientation.
3. The policy awareness form for each will be completed annually.
4. Students are required to complete the DMS Student Handbook Review quiz and Policies and Procedures Manual Review quiz each semester in the clinical internship ICON course sites.
 - Students must receive an 80% or higher on each quiz for successful completion.
5. Failure to successfully complete the DMS Student Handbook Review quiz and Policies and Procedures Manual Review quiz will result in removal from clinical internship rotations for policy and procedure review with the Program Director.
6. Time absent from clinical rotations for review attendance will be subject to the Clinical Attendance & Personal Time policies.
7. Students with multiple failed Policy and Procedures quizzes will be subject to the Judicial Procedure for Disregard of Clinical Policies (see Policies & Procedures Manual for students in the Radiation Sciences and NMT Program).

POLICY AWARENESS FORM

DIAGNOSTIC MEDICAL SONOGRAPHY STUDENT HANDBOOK

This is to verify that I have read and understand the Policies and Procedures for the University of Iowa Diagnostic Medical Sonography Program. I promise to abide by these policies while a student in the above Program. Signed documentation is housed in the program's electronic clinical records system (eValue).

STUDENT SIGNATURE

DATE

Pregnancy Process

Policy:

Students that have been issued a radiation dosimeter while in the Program will follow the Radiation Sciences and Nuclear Medicine Policies and Procedures Manual. The policy in this handbook is for students that are not issued a radiation dosimeter and are not held to the Environmental Health and Safety (EHS) Office Pregnancy Declaration process.

The Pregnancy Process for Diagnostic Medical Sonography has voluntary adherence. If a student chooses to voluntarily disclose their pregnancy, they should follow the procedure below. Once a declaration of pregnancy is made, the student may withdraw this declaration at any time by submitting a written statement to the Program Director (PD).

Procedure:

1. The student should disclose their pregnancy to the Program Director.
2. Within seven (7) days** of the pregnancy declaration, the student will decide if they wish to:
 - a. Remain in the Program
 - b. Submit for a leave of absence
 - c. Withdraw from the Program
3. Following the pregnancy disclosure, the student will be provided information as to potential risks associated with pregnancy in the healthcare workplace. Information will come directly from the University of Iowa Healthcare Institutional Policy Manual, Human Resources Policy HR.P.19, Pregnancy in the workplace.
4. If a student chooses to remain in the program during the pregnancy, they are expected to perform assigned clinical internship duties.
5. Refer to the Clinical Attendance and Personal Leave Time policies found in this document and the Leave of Absence policy in the Radiation Sciences and Nuclear Medicine Policies and Procedures Manual as needed for time off due to appointments and maternity leave.

**Students may revisit their attendance and completion plan at any time in their pregnancy. Contact your Program Director to do so.

Corresponding Policy:

UIHC The Point > Policies and Procedures > Policy Tech > search Pregnancy in the Workplace, HR.P.19

Resources and Equipment

Libraries: Diagnostic Medical Sonography Program Library
Program Director's office, C723 GH
Place card in silver checkout box on the counter

Hardin Library for Health Sciences
Follow library guidelines, explained at orientation

Radiology Library
Department of Radiology, Administrative area, 3JPP
Follow library guidelines, explained at orientation

Computers: Computers are available at Hardin Library in the Information Commons. There are computers available in the Radiology Library. There are various computers located throughout University of Iowa Health Care complex. All these computers have Internet access.

ICON is the course management system used by the University of Iowa. Course material may be available on ICON at the instructor's discretion.

The students have access to the University of Iowa Health Care EPIC systems to obtain patient information for clinical practice.

Copies: Copies are not to be made on the program's copy machine or in the Radiology library. Copies are available on the first floor of Hardin Library for a fee.

Faxes: Personal faxes may not be sent from the program fax machine; however, personal faxes can be received from the program fax machine located in C725 GH.

Remedial Competency

A remedial competency may be given if a Radiation Sciences Educator, staff sonographer/technologist or Clinical Instructor observes a student doing an exam incorrectly after the student has completed the competency for that exam. The exam in which the remedial competency was given will go into the remedial category for the student. This will be recorded as remedial. This will not erase the original 'pass' for the competency, but the student will:

1. Be back on direct supervision for the exam until the remedial competency has been completed.
2. Need to obtain one signature for the exam before they can repeat the competency.
3. Need to repeat the competency with a Clinical Instructor or Radiations Sciences Educator (NOT on the same day a signature was obtained).
4. Complete all remedial competencies before graduation.
5. The number of remedial comps will be counted continuously throughout the program. For each remedial comp received the student will have that semester's competency portion of the Clinical Internship grade lowered by one grade level (i.e., A to B). For example, if the student receives one remedial in Clinical Internship 2 the competency portion of the clinical internship grade will be lowered for that semester only. If the student receives a second remedial in Clinical Internship 4 only that semester's portion of the grade will be lower. Clinical Internship 3-semester grade would not be affected.

Retention Assessment

Policy

Retention assessment competencies are performed as part of the DMS Program's ongoing quality assurance and outcome assessment evaluation that is required for high quality education, high quality patient care, programmatic accreditation, and process improvement. Students will ask their clinical instructor or supervising sonographer to complete retention competency exams following the standard competency exam procedure and the additional retention assessment procedure.

Procedure

1. Exams are completed on exams that the student has successfully completed on.
2. Inadequate performance during a retention assessment will result in a failed assessment.
3. Inadequate performance during a retention assessment may result in the assignment of a remedial competency.
4. Retention assessment competency exams will be completed during clinical internships IV-V as follows:
 - a. 6 Adult Cardiac retention comps
 - b. 2 Abdomen retention comps
 - c. 2 GYN retention comps
 - d. 2 OB retention comps
 - e. 4 Vascular retention comps

Scanning Lab

Please refer to the Simulation Activities – Student Participation procedures in the Radiation Sciences and Nuclear Medicine Policies and Procedures Manual. The Diagnostic Medical Sonography Program Scanning Labs Policy below provides more details specific to students in the Program.

POLICY:

Students in the Diagnostic Medical Sonography Program may volunteer to be a model for supervised hands-on demonstration labs. Sonography student participation in scanning lab imaging procedures as a model is strictly voluntary, they do have the right to decline for any reason. They will not be penalized if they choose not to be a model for supervised scanning labs.

PROCEDURE:

1. Scanning labs are defined as supervised clinical education where one student will scan a model or an ultrasound phantom using program or departmental sonographic equipment in order to obtain practical scanning experience prior to scanning on patients.
2. Scanning labs must be supervised by a program staff (program director, educator, or clinical instructor). The only exception to this rule applies to scanning ultrasound phantoms, this may be done individually with permission from program educators or staff sonographers.
3. Students must keep a log of the ultrasound imaging which is performed on them. This should include the amount of time, type of transducer, imaging mode and the anatomic area imaged. Please refer to Scanning Lab Log Sheet. (page 43)
4. There shall be no scanning labs on pregnant females.
5. The following policy is the American Institute of Ultrasound in Medicine (AIUM) statement on clinical safety for diagnostic medical sonography. If further information is desired, please refer to the AIUM brochure on Safety Considerations for Diagnostic Ultrasound. This brochure is available for review.

AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE
STATEMENT ON CLINICAL SAFETY

AIUM STATEMENT ON CLINICAL SAFETY

October 1982

Revised October 1983

Diagnostic ultrasound has been in use for over twenty-five years. Given its known benefits and recognized efficacy for medical diagnosis, including use during human pregnancy, the American Institute of Ultrasound in Medicine herein addresses the clinical safety of such use:

No confirmed biological effects on patients or instrument operators caused by exposure at intensities typical of present diagnostic ultrasound instruments have ever been reported. Although the possibility exists that such biological effects may be identified in the future, current data indicate that the benefits to patients of the prudent use of diagnostic ultrasound outweigh the risks, if any that may be present.

6. The Scanning Lab Consent Form (attached) must be read and signed by each student who intends on volunteering [as a model] in the scanning labs. This consent form will be kept in the student's permanent file.

Adopted 9/95; Minor revisions 08/01; 8/24 added "model" terminology 2024 for clarity

Scanning Lab - INFORMED CONSENT FORM FOR STUDENTS

I hereby consent to be scanned as a model for the Diagnostic Medical Sonography Program, Department of Radiology, University of Iowa Hospitals and Clinics scanning labs. The purpose of these scans are to provide students with an opportunity to obtain practical scanning experience under direct supervision. I understand that the scanning procedure which I will experience is not a diagnostic procedure. I understand my participation as a scanning model is not required, and I will not be penalized if I choose not to participate.

RISKS-Although studies have been conducted to assess the health risks from ultrasonic energy, a common conclusion reached was that the studies necessary to support a definitive assessment of risk have not yet been completed and may require many years for completion. However, clinical experience to date shows that ultrasound is a safe, useful means of conducting diagnostic examinations and there is not compelling reason to believe that adverse delayed effects will be apparent in the future.

I have read and had opportunity to receive clarification on any questions I had about the content of the program policy on scanning labs, including the AIUM Statement on Bioeffects.

Signed: _____

Date: _____

Witness: _____

Adopted 9/95

Scanning Lab – OPT OUT FORM FOR STUDENTS

I do not consent to be scanned as a model for the Diagnostic Medical Sonography Program, Department of Radiology, University of Iowa Hospitals and Clinics scanning labs. I intend to still participate in lab by scanning models and phantoms.

I have read and had opportunity to receive clarification on any questions I had about the content of the program policy on scanning labs, including the AIUM Statement on Bioeffects.

Signed: _____

Date: _____

Witness: _____

Scanning Lab Log Sheet

Name: _____

[illegible]

Student Supervision

Policy:

General supervision of the students in the Diagnostic Medical Sonography Program is provided by the Program Faculty, Clinical Preceptor, and Clinical Instructors.

Direct supervision of the students in the clinical area will be provided by the Program Faculty, Clinical Preceptor, and Clinical Instructors. The Sonographers will review the request for the Ultrasound examination to determine the following:

- a. The capability of the student to perform the examination with reasonable success; or
- b. To determine if the condition of the patient contraindicates the performance of the examination by the student.

Indirect supervision of the students in the Diagnostic Medical Sonography Program requires that a qualified registered Sonographer is on the premises or in the vicinity of the Ultrasound exam area and is available for assistance to the students. All sonograms produced by the student during the course of the examination must be reviewed by a qualified registered Sonographer or by the Physician before the patient can be dismissed.

Procedure

1. Students must be directly supervised until competency is achieved. Competency is achieved when they have successfully passed the competency for a specific exam/view.
2. Students must be directly supervised during all surgical, invasive procedures and all mobile exams, regardless of the level of competency.
3. Once students have achieved competency, they may work under indirect supervision for applicable exams.
4. Students found to be in violation of the Student Supervision policy are subject to the Judicial Procedure for Disregard of Student Supervision Policies (see Radiation Sciences and Nuclear Medicine Degree Policies & Procedures manual).
5. Students have the right to appeal any disciplinary action taken by following the process found in the General Catalog [Carver College of Medicine < University of Iowa \(uiowa.edu\)](http://www.carvercollege.edu)

***Students operating in an employee role cannot supervise students operating in their student role.**

Student Volunteer Opportunities

Policy:

Students may participate in various program related activities. These activities are voluntary. Opportunities for volunteer activity listed below are subject to change.

Procedure:

1. The clinical coordinator or program designee will meet with the students to present volunteer opportunities available to them for the remainder of their time in the program.
2. Activities include, but are not limited to:
 - a. Job shadow escort
 - b. STEM/STEAM events
 - c. Introduction to Radiation Sciences course student panel
 - d. Career events
 - e. Staff appreciation events
 - f. Service events
 - g. Professional conference attendance
 - h. Professional conference presentations
 - i. Student mentorship
 - j. Prospective student recruitment events
3. Students who are interested in participating must notify the clinical coordinator to be added to the student volunteer list.
4. Students who volunteer will be notified by email when opportunities are available.
5. For activities with limited space, volunteers will be taken on a first come, first serve basis.
6. Students may not participate in volunteer activities if they:
 - a. Are negative clinical absence hours.
 - b. Received an F in any portion of their clinical internship grade the prior semester.
 - c. Have received more than one (1) policy violation in the current semester.
7. Students will be notified by the clinical coordinator if a volunteer activity earns clinical absence hours. Any activity earning clinical absence hours will be earned at a rate of 1:1.

Tuition & Fees

Tuition & Fees

Students in the Program will be assessed tuition & fees from the University of Iowa.

[Tuition, Fees, and Expenses \(On Campus Programs\) | Radiation Sciences Programs \(uiowa.edu\)](#)

[Tuition & Fees | Office of the Registrar \(uiowa.edu\)](#)

[The University of Iowa – Tuition & Fees \(uiowa.edu\)](#)

Miscellaneous Fees

Program Acceptance Fee/Tuition Deposit/Clinical Assessment Fee:

- \$535.00
- \$300 will be credited toward tuition for Fall Semester

Textbooks: \$500 (approximate) for textbooks before entering the Program

Course fees: vary by semester. See MyUI website.

Clinical Uniforms: \$200 (approximate) for uniforms

- Three (3) scrub sets and shoes before entering the Program

ARDMS Certification Examinations:

- SPI - \$250.
- Abdomen - \$275
- Obstetrics and Gynecology - \$275
- Adult Echocardiography - \$275
- Vascular - \$275

Tuition Refunds

UI tuition and fee refunds will occur according to the published UI schedule of courses, significant deadline dates.

[Academic Calendar | Office of the Registrar | The University of Iowa \(uiowa.edu\)](#)

