Rochester Institute of Technology

Policies and Procedures

Diagnostic Medical Sonography Program
Echocardiography Certificate
Diagnostic Medical Sonography Program
Echocardiography Certificate

The Policies and Procedures Handbook is provided to help guide and educate students about the policies, rules, responsibilities, and regulations of the Rochester Institute of Technology Diagnostic Medical Sonography Program and Echocardiography Certificate. Students should familiarize themselves with it before beginning class work.

On the cover:
CBET Building 75 The Center for Biosciences Education & Training and the ultrasound scanning laboratory
Obtaining the skills to practice medical ultrasound is a complex process. A carefully planned course of study has been developed to offer a balance of didactic and practical knowledge. Many opportunities, in the form of evaluations, are provided for measurement of progress by both faculty and you. In addition to a fully staffed Learning Development Center, individual instruction may be provided in certain instances. Every effort is made to provide a complete learning environment. Even though the Program provides a variety of experiences, learning situations, and tools, the single greatest factor, motivation, is essentially up to you.

This Handbook is to be your guide for completion of the Diagnostic Medical Sonography Echocardiography Certificate Program at RIT. If students are in doubt about the intent or content of any of the following material or if they do not find the information they need, it is their responsibility to initiate a discussion with the program faculty. Ultimately it is your responsibility to seek out answers to any questions or concerns regarding the following material. Do not hesitate to call on the Program Director or the Concentration Coordinator for any questions or situations which may arise. This Handbook may be periodically updated or amended. Should this occur, students will be notified. **Students will be required to read this handbook and sign a statement verifying that fact. Your signature will serve as proof that students have read, understand and agree to abide by the guidelines presented herein.** This statement form can be found on the back page of this handbook and must be signed and returned to the program faculty no later than Oct 1, 2015.

**Program Faculty**

Direct all questions related to didactic work and clinical experience to the Program Director or Clinical Coordinator. Please keep the following addresses close at hand. Students should contact the Program Director or the Clinical Coordinator immediately should any problems or questions arise.

**Program Director**

Hamad Ghazle, Ed.D., APS, RDMS  
Rochester Institute of Technology  
Diagnostic Medical Sonography Program  
153 Lomb Memorial Drive  
Rochester, NY 14623-5603  
Telephone: (585) 475-2241  
Fax: (585) 475-5809  
Office 75-1171  
Email: hhgscl@rit.edu

**Concentration Coordinator**

Bridgett Mayorga, MS Ed, RDCS, RVT  
Rochester Institute of Technology  
Diagnostic Medical Sonography Program  
153 Lomb Memorial Drive  
Rochester, NY 14623-5603  
Telephone: (585) 475-7903  
Fax: (585) 475-5809  
Office 75-2139  
Email: blmihst@rit.edu

The faculty and staff of the Diagnostic Medical Sonography Echocardiography Program welcome you and wish you well in your studies. We will do our best to help you accomplish your goals. You are our top PRIORITY.
The following reflects the mission of the Rochester Institute of Technology and the Diagnostic Medical Sonography Echocardiography Program:

**Mission of the Rochester Institute of Technology**

RIT's mission is the education of men and women for work and life in a democratic, technological and global society. 

More specifically, the Institute's mission is to offer a variety of career-oriented post-secondary programs at the undergraduate and graduate level through the master's and first professional degree.

The educational mission of the Institute is to prepare graduates with such knowledge and background as will enable them:

- to enrich themselves intellectually, culturally, physically and spiritually
- to confront social, political, and ethical issues intelligently and creatively
- to find useful and satisfying employment
- to pursue further studies at more advanced levels

A further mission of the Institute is to encourage research, writing, and artistic endeavors. Another important dimension of RIT's mission is to offer continuing education programs, as well as academic services in fields that pertain to the Institute's area of expertise.

It is integral to the Institute's mission to function as a dynamic center of higher education where the arts, the sciences, technology, and other dimensions of human knowledge and civilization are valued, cultivated, and applied.

The RIT community engages and motivates students through stimulating and collaborative experiences. Our mission is to provide technology-based educational programs for personal and professional development. We rigorously pursue new and emerging career areas. We develop and deliver curricula and advance scholarship relevant to emerging technologies and social conditions. Our community is committed to diversity and student centeredness and is distinguished by our innovative and collaborative spirit.

Internal and external partnerships expand our students’ experiential learning. RIT is committed to mutually enriching relationships with alumni, government, business and the world community. Teaching, learning, scholarship, leadership development, and student success are our central enterprises.

**The Educational Goals of RIT**

Consistent with its philosophy and mission, RIT has the following goals:

- To inspire students to high standards of excellence in their professional, scholarly, and creative endeavors.
- To provide students with the appropriate knowledge and skills which will enable them to become competent professionals in their fields.
- To develop in students a basic understanding of the scientific and technological framework in which modern societies function.
- To familiarize students with the various modes of inquiry which are necessary for un-
derstanding and appreciating the universe of which we are a part.

➢ To develop in students the understanding and sensitivity necessary for experiencing the aesthetic dimensions of life and work, and for appreciating other cultures.
➢ To develop a capacity for critical and informed thinking, in judging and evaluating moral and societal issues.
➢ To bring about opportunities for students to explore a variety of work environments in their chosen professional fields.
➢ To develop in students the capacity to use all available resources for self-learning, problem solving, and personal growth.
➢ To enable students to acquire skills and interests that will lead to a fuller enjoyment of their leisure and avocational activities.
➢ To help students communicate effectively by developing both expressive and receptive language skills to an appropriate level of competency.
➢ To develop an appropriate level of mathematical literacy and competency, in students.
➢ To develop an appropriate level of computer literacy and competency, in students.

Mission Statement of the College of Health Sciences and Technology

The College of Health Sciences provides educational programs combining professional studies, sciences, mathematics, computer science, liberal arts, and experiential learning of sufficient depth and breadth to prepare individuals for allied health careers. Integrating technology into the classroom is of primary importance to the College of Health Sciences and Technology. Cultivated in our programs’ curricula are the skills of critical thinking and decision-making, as well as effective communication. These balanced curricula serve to stimulate the growth and maturation of our students over the course of their professional and personal lives.

Our programs promote self-motivated learning that extends throughout a lifetime. This lifetime learning promotes a sensitive and practical concern for the needs of others.

Therefore, it is our hope to instill in our students the desire to be models for human interaction, advocates of human values, community leaders, and lifelong learners who enjoy meaningful work and demonstrate a commitment to humanity and their profession.

Mission Statement of the Diagnostic Medical Sonography Program

The Diagnostic Medical Sonography Echocardiography Program combines a strong science education, practical experience, and liberal arts education to prepare individuals for careers in Diagnostic Medical Sonography and related fields or graduate study. Curricula provide individuals an opportunity to make significant contributions to the society, in general, and to the profession, in particular.

The mission statement of the College of Health Sciences and Technology mentioned above also reflects the spirit of the Program's values as well as the commitment of the individuals involved.
in the implementation of the Program.

**Diagnostic Medical Sonography Echocardiography Program Objectives and Outcomes**

Upon completion of the Diagnostic Medical Sonography Program, the candidate will be expected to:

- Demonstrate a working knowledge of hospital functions in general, and the echocardiography, and or cardiology department in particular, to include: basic skills, emergency care, patient-technologist relationships, and professionalism.
- Describe and utilize routine procedures performed in Echocardiography
- Demonstrate proficiency and fluency in the use of medical terminology, especially those pertaining to Echocardiography
- Be skilled in the operation of ultrasound instrumentation and laboratory equipment under guidance from professional staff.
- Be capable of scheduling and performing the daily workload of Echocardiography procedures/examinations.
- Evaluate new procedures where necessary.
- Distinguish between normal and abnormal sonographic appearance of different Echocardiography anatomical structures.
- Create high quality diagnostic scans.
- Identify and understand important features of disease processes including: Pathophysiology, signs and symptoms, significant laboratory data, diagnostic techniques, prognosis, and treatment.
- Demonstrate an understanding of the humanistic and ethical considerations of medical care.
- Demonstrate the ability to maintain quality control of the ultrasound equipment.
- Be familiar with the biological effects of ultrasound and be aware of the acoustic output levels produced by the equipment they use.
- Demonstrate the ability to explain Doppler principles and techniques, especially those pertaining to cardiovascular system.
- Have the necessary knowledge and skills to achieve success on the American Registry of Diagnostic Medical Sonography examinations.
- Be successful in a career as a Registered Diagnostic Cardiac Sonographer.
- Demonstrate the ability to follow Occupational Safety and Health Administration (OSHA) standards in clinical practice.
- Maintain CPR certification during the clinical component of the student’s education.
- Demonstrate professional integrity, honesty, dependability, respect for self and others, compassion, and an ability to protect patient confidentiality and trust at all times.
- Demonstrate commitment to the ideals of life-long learning, professional excellence, teamwork,
and tolerance for diversity and community service.

- Recognize and comply with the accepted standards within the Health Insurance Portability and Accountability (HIPAA) Act of 1996.

**ACADEMIC STANDARDS**

Students enrolled in the Diagnostic Medical Sonography Echocardiography Program are expected to conduct themselves in an appropriate fashion at all times. The criteria for evaluating appropriate performance include, but are not limited to, demonstrating professional competencies and skills; adhering to the Diagnostic Medical Sonography Echocardiography Program's policies and procedures; displaying sensitivities to patient and to community needs; demonstrating ability to relate to peers, instructors, and other members of the health care team; maintaining regular and punctual attendance in classes or in all professional settings; and maintaining acceptable physical appearance. These requirements for performance have been established to protect the rights of patients and communities, to foster the team concept in the delivery of health care, and to create a productive educational environment. Should a student be unable or unwilling to demonstrate these, he/she will be in violation of the program academic standards. Violation of any of these standards may be cause for dismissal from the program. Therefore, compliance with the following academic standards is essential:

A. The student shall assume as his/her primary responsibility the health and safety of the patient.

B. If there is any question or complaint concerning an assignment during a clinical activity, the student should discuss the problems with the individual assigned to supervise them, the preceptor or the program clinical coordinator or program director.

C. The student shall state truthfully and accurately his/her student status in interactions with patients, health professionals, and other individuals.

D. The student shall deliver needed health care service to patients without regard to race, age, sex, creed, sexual orientation, disability or health, marital status, veterans status, socioeconomic status, political persuasion, or national origin.

E. The student shall have ongoing communication with his/her clinical instructor as assigned, to safeguard and enhance the care of the patient and to ensure the development of his/her clinical and technical skills. **Students are not to assume primary or sole responsibility for patient care.** No student shall see, complete an examination, or discharge any patient without discussing the patient with the responsible clinical instructor.

F. The student shall conduct his/her self in a professional manner relating to patients, faculty, and professional staff. The student furthermore shall refuse to participate in, or conceal any, illegal or unethical practice or procedures.
G. The student shall hold all privileged patient information in confidence, following HIPAA guidelines, unless they are required to release such information by law or the release of such information becomes necessary to protect the welfare of the patient or the community.

H. The student shall perform only those procedures authorized by the clinical affiliate, service, preceptors, and the Program.

I. The student shall not display obstructive, inappropriate, or disruptive behaviors towards another student, faculty member, clinical staff member, or especially, a patient. In particular the student must be appropriately responsive to the requests of their instructors, faculty, and patient population.

J. The student shall observe the specific rules and regulations of the clinical site.

DEGREE REQUIREMENTS

Certificate Option

Candidates for the Certificate in Diagnostic Medical Sonography Echocardiography Concentration by the College of Health Sciences must satisfy the following requirements:

- The student must have made full payments or satisfactory adjustment of all financial obligations to the Institute.
- The student must have successfully completed a minimum of 53 semester cred hours.
- The student must have a cumulative program grade point average of at least 2.50.
- The student must have successfully completed the writing requirement as described by the Institute and the Diagnostic Medical Sonography or Echocardiography Programs.
- The student must have successfully completed the specific course requirements, or equivalents, as described in the Diagnostic Medical Sonography or the Echocardiography Programs curriculum.
- The student must have successfully completed the Health Form/Update prior to the start of the clinical rotations/internship.

TECHNICAL STANDARDS

All students in the Diagnostic Medical Sonography Echocardiography Program must possess the intellectual ability to learn, integrate, analyze, and synthesize data. They must have functional use of the senses of vision, hearing, and equilibrium. Students must have motor function capabilities to meet the demands of Diagnostic Medical Sonography and Echocardiography education and the demands of patient care.
The Diagnostic Medical Sonography Echocardiography student must possess the following capabilities and skills listed below:

**Observation:** The ability to observe is required for demonstrations, visual presentations in lectures and laboratories, laboratory evidence and microbiological cultures, microscopic studies of microorganisms and tissue in normal and pathologic states. The ability to discriminate among blacks, grays, and whites, and various color combinations that indicate blood flow on both display devices and recorded images (film and paper) is required for scan interpretation. A student must be able to observe patients accurately and completely, both at a distance and closely.

**Communications:** A Diagnostic Medical Sonography Echocardiography student must be able to communicate effectively via speech, reading, and writing. He/she should be able to hear and observe clinical staff and patients in order to elicit information, perceive nonverbal communications, describe changes in mood, activity and posture, and recognize and respond to an emergency or urgent situation. In addition to patient and clinical staff communication, the student must be able to communicate orally and in writing with physicians and other health care professionals.

**Motor:** An ultrasound student should possess the ability for gross and fine motor function, manual dexterity, and physical strength to:

- Apply general care & emergency treatment to patients
- Help lift patients who may be unable to move themselves from wheelchairs or beds to the examination table and vice versa (up to 10-25 patients per day)
- Lift and move objects (50 pounds or more routinely)
- Manipulate ultrasound equipment, computers, and peripherals
- Distinguish audible sounds
- Adequately view sonograms, including color distinctions
- Work standing on his/her feet 80% of the time
- Have full use of both, hands, wrists and shoulders involving the coordination of muscular movements, equilibrium, and sensation.

**Intellectual:** Conceptual, integrative, and quantitative abilities are required. Problem-solving is a critical skill demanded of sonographers and this requires all these abilities. The student must also be able to comprehend multi-dimensional relationships and the spatial relationships of anatomic structures.

**Behavioral and Social Attributes:** A student must be emotionally healthy. The student must be able to use his/her intellectual ability and exercise good judgment, to complete all responsibilities attendant to obtaining a quality ultrasound study and providing care to patients.
A student must be able to develop mature, sensitive, and effective relationships with patients and colleagues. An ultrasound student must be able to tolerate physical and emotional stress and continue to function effectively. A student must possess qualities of adaptability, flexibility, and be able to function in the face of uncertainty. He/she must have a high level of compassion for others, motivation to serve, integrity, and a consciousness of social values. A candidate must possess sufficient interpersonal skills to interact positively with people from all levels of society, and all ethnic and religious backgrounds.

ACADEMIC POLICY

The Diagnostic Medical Sonography Echocardiography Program Academic Policies & Procedures strictly adhere to that of the Rochester Institute of Technology Educational Policies and Procedures Manual in conjunction with the RIT Undergraduate Bulletin with the following clarifications and stipulations:

Any student whose Semester grade point average falls below 2.5, or whose cumulative grade point average and/or College of Health Sciences and Technology grade point average falls below 2.5 will be placed on probation.

Any student that has been placed on probation according to above, is removed from probation for achievement of both a 2.5 program semester grade point average and a 2.5 cumulative grade point average in the College of Health Sciences and Technology.

Any student who is on probation according to the above terms and who is not removed from probation in the two succeeding periods of study in which credit is earned, will be suspended from RIT for a period of not less than one semester.

Any student who has been placed on probation, after having been removed from probation, and whose College of Health Sciences and Technology grade point average is 2.5 or above will be granted one semester to be removed from probation or he/she will be suspended from RIT.

Any student whose program semester grade point average falls below 1.0 will be suspended from RIT.

A student may apply to the Office of Admissions for re-admission at the end of his/her suspension. Re-admission to the Diagnostic Medical Sonography Echocardiography Program must be approved by the Dean of the College of Health Sciences and Technology and the Diagnostic Medical Sonography Program.

PRE-CLINICAL PRACTICAL/COMPETENCY EXAMINATIONS

The practical portion of this program is much different than the written portion. There are skills that must be proficiently learned in the ultrasound scanning laboratories before students are entitled to enter the clinical rotation stage of the Diagnostic Medical Sonography Echocardiography program. These skills will be practiced during the fall, winter and spring quarters of the Echocardiography
Scanning laboratories. At the end of the each quarter, the student will have their practical skills evaluated.

Failure to meet the minimum required skills needed to enter the clinical stage of the program will result in the student not being allowed to continue in the program and into their clinical rotation stage.

**Evaluation of the skills necessary in order to be permitted into the clinical rotation stage of the Diagnostic Medical Sonography Echocardiography Program:**

Understanding of the knobology of the ultrasound machine. This is to include, but not limited to:

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<td>Applications</td>
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<td>Biopsy Guide</td>
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<td>Freeze</td>
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**Scanning Techniques**

Many different scanning techniques are taught during the course of the scanning laboratories of the 3rd year. These are found in the Ultrasound Scanning Principle and Protocols textbook (Required) and also on handouts that are given throughout the year. Lastly, they are available online on Mycourses and always available from the Clinical Coordinator upon request. These techniques include, but are not limited to:

- Transducer selection
- Application selection
- Patient preparation
- Patient positioning
- Breathing techniques
- Scanning windows
Understanding and Memorization of Basic Scanning Protocols.

These are the basics that are used to complete the examinations that are taught during the 3rd year of the DMS or Echocardiography programs in the scanning laboratories. These protocols must be recalled, stated, and followed by the student during the scanning sessions and examinations. They must be in a logical sequence that is easily followed by a sonography instructor or clinical coordinator who is watching, reviewing, or observing the scanning by a student or testing the student.

Clinical Write Up of Diagnostic Information

It is the goal of this program to produce quality diagnosticians. In order to do this, it is necessary that candidates for the clinical rotations understand both the scanning skills necessary to produce diagnostic quality images and the professional standards that are used in reports. This includes, but it is not limited to:

Abdomen
Small parts
OB/GYN
Vascular
Echocardiogram

Patient Care and Interaction

This aspect of the profession is wide and encompasses many facets. The ones that are focused on are the following:

Ability to obtain accurate medical history which is relevant to the exam being performed

Ability to communicate effectively and efficiently

Ability to report medical findings to appropriate medical staff in a logical, professional manner

Ability to assist the patient in the necessary areas to get on and off the exam table, properly dressed or undressed (as needed) and meet their non ultrasound relate needs, such as toiletry, oxygen, etc.

Cardiac Anatomy and Physiology

This is an area where the classroom knowledge must be brought over into the clinical setting and used to obtain diagnostic quality images. It will be necessary for all candidates to be able to relate the textbook work and knowledge that they have learned in the classroom relating to cardiac anatomy into the actual scanning of the patient. The student will be asked to scan patients and to be able to identify the anatomy seen in the
images, both in real time or on a still image. They must be able to describe what they are looking at using accurate ultrasound terminology (which will be provided to every student as a part of the fall semester or any time there after upon request from the clinical coordinator, concentration coordinator or program director).

**GRADING POLICY**

The grading policy for most courses in the first two years is at the discretion of the instructor.

**PRE-CLINICAL**

**Didactic**

The grading policy for Scanning laboratories examinations and other related ultrasound courses excluding pre-clinical competencies or practical pre-clinical examinations, is as follows:

- A = Above 95%
- A- = 90-94%
- B+ = 87-89%
- B = 83-86%
- B- = 80-82%
- C+ = 77-79%
- C = 73-76%
- C- = 70-72%
- D = 60-69%
- F = Below 60%

Students must have a minimum of 70% to successfully complete the courses. If a student fails to maintain 70% on any examination the student will need to take a make-up examination, to ensure adequate competency in the designated material. The make-up examination will be given at an assigned time specified by program faculty. The initial failed examination score will be the numerical value which will be used in the final grade calculation.

- If a student fails (<70%) the make-up examination, the student will appear before the program faculty to discuss specific academic options. If it is determined that the student should not continue in the Program, the student will be offered a change of program into any RIT Program for which he/she is qualified and/or accepted.

- If a student fails (<70%) two or more examinations in a particular course, the student will appear before the program faculty to discuss specific academic options. If it is determined that the stu-
dent should not continue in the program, the student will be offered a change of program into any RIT program for which he/she is qualified and/or accepted.

Pre-Clinical Competencies/Practical Pre-Clinical Examinations

Requirements for Pre-Clinical Competency:

- Be able to demonstrate appropriate relational and structural anatomy in a logical order, including all of the required images that are stated on the competency sheet and the protocols provided by the instructor.
- Be able to set up the machine and get it ready to perform the examination (i.e. correct transducer frequency, application, and name field)
- Be able to apply proper scanning and imaging techniques (Depth, Focus, Overall Gain, and TGC) to obtain diagnostic quality images.
- Be able to correctly label the required images and answer any questions related to the competency and the organ in question.
- Be able to appropriately interact with the person (patient) during the exam. This includes breathing techniques and verbal cues needed to have the patient in the optimal position for the exam. (These techniques are stated in the Scanning Protocols and Principles textbook and must be memorized).
- Be able to complete clinical competencies in the allotted time.
- A grade of a “B” or higher is needed to successfully pass the pre-clinical competency examination.
- The grading policy for the pre-clinical competencies or practical pre-clinical examinations, is as follows:
  - A - 90 - 100%
  - B - 80 - 89%

Students must have a minimum of 80% to successfully complete the competency. If a student fails to maintain an 80% on any competency the student will need to perform a make-up competency, to ensure adequate competency in the designated material. The make-up competency will be given at an assigned time specified by program faculty. The initial failed competency score will be the numerical value which will be used in the final grade calculation.

- If a student fails (<80%) the make-up competency, the student will appear before the program faculty to discuss specific academic and clinical options. If it is determined that the student should not continue in the Program, the student will be offered a change of program into any RIT Program for which he/she is qualified and/or accepted.

- If a student fails (<80%) two or more competencies in a particular area, the student will appear before the program faculty to discuss specific academic options. If it is determined that the stu-
dent should not continue in the program, the student will be offered a change of program into any RIT program for which he/she is qualified and/or accepted.

**CLINICAL ROTATIONS/INTERNSHIP**

Moreover, your internship performance is shown by a letter grade on your college transcript. Because internship rotations and college quarters do not match up, students may receive an "incomplete" until rotations are finished and then the letter grade will be given. Grades are based on several items, with each item having a specific point value. These items, which are listed below, cover both the didactic and clinical aspects of the internship.

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<td>Attendance</td>
<td>Clinical and instructional objectives</td>
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<td>Examinations</td>
<td>Student evaluations</td>
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<td>Internship paper</td>
<td>Clinical competencies</td>
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<td>Clinical imaging practicum</td>
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<td>Case studies</td>
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The final overall grade for each course is based on percentage of total points.

- A = Above 95%
- A- = 90-94%
- B+ = 87-89%
- B = 83-86%
- B- = 80-82%
- C+ = 77-79%
- C = 73-76%
- C- = 70-72%
- D = 60-69%
- F = Below 60%

Students must maintain a “C” average or better to be able to continue your clinical rotation/internship. Students will not graduate or receive a certificate unless students satisfactorily complete and submit the required assignments for each rotation. The ultimate responsibility for assigning grades for both didactic and clinical work lies with the Program Director.
Clinical Rotations/Internship Competencies

Clinical rotation competencies are used as a guide to familiarize students with routine procedures in medical ultrasound that would be performed by entry-level sonographers. The competencies give students the opportunity to learn and master ultrasound procedures through technical and practical experience. They also measure your proficiencies in performing routine ultrasound examinations. Your discretion and your level of confidence determine the date of each clinical competency. The Clinical Instructor may also help students to determine whether students are ready to attempt a particular clinical competency.

Before taking any specific clinical competency examination, students should complete the instructional objectives that pertain to a specific examination or part of the body. Students must also demonstrate adequate knowledge and ability to perform routine clinical procedures with minimal supervision. Students must obtain two signatures from staff sonographers (or clinical instructor) indicating your proficiency in performing all aspects of a designated procedure. Upon completion of these objectives, the clinical instructor, or a staff sonographer designated by the clinical instructor, will individually test students using the clinical competency checklist.

Clinical Competency Format

Each competency examination is divided into the following sections:

- Pre-examination Section
- Patient Care and Preparation Section
- Technical Performance Section
- Imaging Section
- Post Scanning Section
- Case Presentation to the Radiologist/clinical Instructor/or staff sonographer

Each of the six sections consists of a list of duties necessary to perform and images to obtain for an adequate ultrasound examination. The Clinical Instructor must sign off on the final clinical competency. Each item of the final competency should be checked off, and any non-applicable items should be marked as so. Clinical competency checklists, including the patient clinical history form, should be returned to the Concentration Coordinator or Program Director when students return to campus for the next lecture series and at the designated time.

Prior to performing a particular clinical competency for the final signature Students must:

- Obtain and review the clinical competency that is to be performed with the Clinical Instructor (or designated sonographer) from the Student Handbook which will be purchased at the RIT bookstore prior to the clinical rotations/internship.
- **Determine in advance** which patient is to be scanned after being discussed with
sonographer(s) or Clinical Instructor.

- Fill out the Clinical Competency Cover Sheet for that particular exam.
- Give the form to the Clinical Instructor.
- Reasons why a Clinical Instructor may stop the competency examination at once are the following:
  - Entering the incorrect patient information onto the ultrasound screen.
  - The inability or failure to recognize pathology.
  - Scanning the wrong patient.
  - Causing harm to the patient, or the patient is at risk and the exam needs to be completed immediately.
  - As a member of the health care profession, Students must understand that patient care is your first priority. Therefore, if the Clinical Instructor notices that students are committing mistakes during the competency that could be dangerous to the patient, he/she has the authority to stop the competency examination and take over the procedure. Consequently, students will need to repeat it.

**Grading Clinical Rotation/Internship Competencies**

*Please note the clinical rotation competencies are different from the pre-clinical competencies which are graded differently. The grading policy for the pre-clinical course and practical/competency examinations previously stated under Grading policy (Pre-clinical competencies/Practical Pre-Clinical Examinations).*

Points are assigned to every statement according to its level of difficulty and emphasis given in the ultrasound laboratory. A competency examination grade of 80% or better is necessary to pass and move to the next competency. A make-up competency examination **must** be taken if the examination grade falls below an 80%. Make-up or repeat competency examinations must be scheduled within one to four days after the initial examination and at the convenience of the Clinical Instructor. Students will be penalized by one letter grade for every repeat competency examination. For example, the first trial will start with a grade of “A”. If students fail, the second trial will start with a “B” as the highest grade instead of “A” and so forth. If students fail the same clinical competency for three times, and do not show any improvement after proper instruction, students will not be able to graduate or move on into the second clinical rotation.

**PROGRAM PROGRESSION**

Students are matriculated into one of the first three years, upon their acceptance into the Diagnostic Medical Sonography Echocardiography Program. Students must complete academic requirements to progress onto the next academic year. Once matriculated into a class year, stu-
Students are permitted to take a limited number of courses at another institution during the summer, pending Diagnostic Medical Sonography Echocardiography Program approval. It is, however, important that students take core science courses at RIT to ensure a consistent educational experience. Students are not permitted to skip class years once matriculated in the Diagnostic Medical Sonography Program.

UPWARD PROGRESSION MEETINGS
Moving from the third (didactic) year to the fourth (clinical) year of Diagnostic Medical Sonography education is a major transition as they embark on their year of clinical rotations. At the end of the third year, all Diagnostic Medical Sonography students will meet with program faculty. This interview/meeting is designed to provide students with personal insights, reflections, and thoughts regarding their professional development and overall professionalism as they have progressed through the program-to-date. The program faculty will share student strengths and areas of improvement by which the student can expand upon during the senior year or clinical internship.

PROFESSIONALISM
Professionalism is a critical component of the Diagnostic Medical Sonography profession and is a characterization, which strongly embodies the educational process as well. Such personal character traits and attitudes are empathy, respect, honesty, friendliness, and fairness. Timely attendance to classes, meetings, academic advisement sessions are all expectations within the Program. Students are expected to represent themselves with courtesy and respect towards others, actively participate in class, and conduct themselves in classes, on campus, and in clinical affiliates in a respectable, presentable, and well-groomed fashion.

ACADEMIC DISHONESTY
The Rochester Institute of Technology does not condone any form of academic dishonesty. Any act of improperly representing another person's work as one's own is construed as an act of academic dishonesty. These acts include, but are not limited to, plagiarism in any form or use of information and materials not authorized by the instructor during an examination.

The serious nature of this event is deemed extremely consequential within the Diagnostic Medical Sonography Program. Cheating and/or academic misconduct will not be tolerated in the Program. Sharing or disseminating protected materials, such as unpublished exams, written papers or assignments, C-print, or verbally sharing exam material in the form of questions, answers, or content is considered a violation of academic policy and the Honor Code. If a student is found guilty of some form
of academic dishonesty, the student could be given a failing grade for that piece of work and/or the course. Any such actions may lead to disciplinary action and be grounds for automatic dismissal from the Diagnostic Medical Sonography Program.

ADVISING/COUNSELING

The Program Director and Mr. Gary Cole are the faculty and the academic advisors for all students in the Ultrasound Program, respectively. Students must meet with the academic advisor before registering for classes. This will help students avoid any unnecessary course work and/or delay completion of the program.

The Clinical Instructor and the Staff Sonographers evaluate students at each preceptor site. Written evaluations are completed by the Staff Sonographers and Clinical Instructors and reviewed by the Concentration Coordinator and Program Director. The Program Director and/or the Concentration Coordinator will counsel students individually. Strengths, weaknesses, and ways to improve will be identified and discussed with you. In addition to the Program Director, the Counseling Center is available to RIT students at anytime. Information regarding the counseling services at RIT is kept on file in the Program Director's office for your use.

CLINICAL ROTATIONS/INTERNSHIP

RIT has many clinical sites representing a wide variety of ultrasound experiences. Several of these sites are located some distance from the main campus of RIT. The program cannot assure that students will be assigned to a clinical affiliate within the immediate Rochester area or any other place of your choice.

CLINICAL ROTATION/INTERNSHIP ASSIGNMENT

Toward the end of the third (3rd) year of study, each student who is expected to continue in the program will be asked to prioritize, in writing, the region of choice for the clinical internship. The Concentration Coordinator will provide the required form, no later than the last two weeks of the Spring Quarter. Internship regions will be listed with the student asked to rank from one to three (one being the most desirable) the region of choice. Each region will have at least two medical facilities to attend. A typical internship consists of a rotation between two clinical sites with a possible "visit" to a special interest center, all within the same geographic region. In some extraordinary circumstances the student will be required to rotate between two geographic regions to facilitate their clinical experience. **PLACEMENT IN THE LOCATION STUDENTS HAVE REQUESTED CANNOT BE GUARANTEED. IN ADDITION, a rotation assignment may be changed due to unexpected circumstances at the clinical sites. Students will be notified about the situation and a new clinical site will be reassigned.**
PETITION FOR CHANGE OF INTERNSHIP ROTATION ASSIGNMENT

If a student is assigned to an internship that they feel will cause great hardship to them or an immediate family member, they must submit, in writing, a petition requesting the change. Reason(s) should be well documented and presented clearly. The Concentration Coordinator will consider the petition and a final decision will be made within 30 working days upon receipt of the petition. A decision with explanation will be mailed to the student within 7 working days of the decision. All program decisions are final. A student who feels that the program decision is unjustified may appeal to the Program Director in writing. The Program Director will respond immediately to any appeal.

SPECIAL INTEREST MINOR ROTATIONS

During the second rotation, one or two week experiences in a vascular clinic may be arranged. These are subject to the approval of the student’s clinical site and the Concentration Coordinator (minor rotation sites are subject to availability at the time of request). Please remember that arrangements for lodging must be made by you, the student.

GENERAL EXPECTATIONS

The internship is the integration of classroom and clinical experience. A great deal of planning has gone into creating a learning environment that will allow students to obtain the high level skills required for sonography. Seldom does a department perform only one type of exam, but offers a variety of services. Students are encouraged to show a high level of initiative by doing such things as:

- Asking questions and exploring (visit other departments such as CT, Special Procedures, MRI, Surgery, and Pathology; utilize the in-house library, etc.)
- Requesting to scan and/or assist as often as possible (within your capabilities as perceived by the Clinical Instructor and staff sonographers)
- Assisting in routine office duties (logging-in patients, billing, filing, maintaining the pathology file, etc.)
- Maintaining the lab at a high degree of readiness (changing sheets, cleaning, stocking shelves, running diagnostics on equipment, etc.)

Further specific behaviors are cited in the syllabus of each course. In general, are expected and required to participate in every aspect of the departments operation. No matter what the duty, it
will probably help the student to understand the "Big Picture" of Sonography. Please remember that we are guests in the affiliate. They have the right to remove students at any time.

**EMPLOYMENT**

Students may **NOT** be employed during hours that are concurrent with either clinical or classroom education. The student may work outside RIT hours and/or in conjunction with financial aid activities within published guidelines.

**HEALTH CARE**

RIT requires students to maintain health insurance coverage as long as they are enrolled at their facility. RIT automatically provides health insurance for all full-time undergraduate students upon registration. Every full-time student is automatically charged a fee for health services upon registration. Students may obtain coverage through RIT or provide their own personal coverage. An Institute Waiver Form must be signed if the student elects to utilize personal coverage. Information on the specific benefits under this policy may be provided by visiting the Student Health Office located in the August Building (#23) or by calling them at 585-475-2255.

During clinical internships, all medical needs and emergent care should be administered according to the students health care providers set guidelines. Students are responsible for knowing and adhering to your health care provider’s policies and administrative procedures.

Every student must have a Health Status Form (Physical exam) on file in the Program Director’s office before beginning his or her clinical internship. This form will be provided by the Clinical Coordinator and must be completed by a qualified physician. This Health Status form must indicate that the student does not have any condition that endangers his/her own health, the health and well being of other students, patients, and hospital staff. The student must have proof of being immune from Rubella, Rubeola, Mumps and have a negative TB test(s). Blood work will need to be done to prove immunity. If the TB test(s) should be positive, a chest x-ray must be taken and show that students are not currently infectious. If students are NOT immune to Rubella, Rubeola, Mumps or Varicella, action may need to be taken before students are allowed to continue in your clinical. Health Status Forms must be submitted to the Clinical Coordinator before a date specified. Some clinical sites may require special health forms to be completed. The Clinical Coordinator will work with students and the clinical sites to get the forms completed, but it is your responsibility to get all of your forms completed and turned in on time. **No student will be allowed to begin his or her clinical internship without this document!**
HEPATITIS B VACCINE
The majority of clinical affiliates require that students have the Hepatitis B vaccine prior to starting clinical rotations at their site. Although the Diagnostic Medical Sonography Echocardiography Program cannot mandate each student obtain this valuable vaccination, it is VERY strongly recommended. This vaccine is given in a series of three sequential injections over a period of six months. It is recommended that students obtain this vaccine at the start of the third year of the program, if not before, to ensure adequate protection while involved in patient care.

IMMUNIZATIONS
It is required that you have blood drawn (a titer) for your proof of immunization before you are allowed to begin your clinical internship. Some of the clinical sites have different requirements than others, and your site placement will dictate which immunizations you must have, if any, which are above and beyond what RIT requires. There is a minimum requirement of: Rubella, Rubelola, Mumps, and Varicella.

ACCIDENTS WHILE ON DUTY
Students, who are injured or exposed to blood, bodily fluids, or a contaminated needle, must immediately report the incidence to their Clinical Instructor and the Program Director or Clinical Coordinator. Students may need to complete an incident report on the injury depending on the policies of each clinical site. Students must familiarize themselves with the rules and policies regarding incident reports at the clinical site students are attending.

INFECTIOUS DISEASES
Students should be aware of, and adhere to, the policies and measures that the clinical sites use to protect both patients and hospital staff from communicable diseases. Universal precautions should be used for all cases with a risk of exposure to a communicable disease. Students must respect and protect all patients whether they have a communicable disease or not. All students must be under a sonographer’s supervision when performing examinations on patients at risk for, or with known communicable diseases.
JOB PLACEMENT

The Rochester Institute of Technology does not state or imply that graduation from the bachelor or certificate options in the Diagnostic Medical Sonography Echocardiography Program will ensure students will find a job in the field of Diagnostic Cardiac Sonography. It is the student’s responsibility to seek out employment for himself/herself. Echocardiography job openings received by RIT are placed on the Program Bulletin Board located on the first floor across from the faculty offices in the CBET Building 75.

LIABILITY INSURANCE

Each student entering the internship portion of the program is automatically insured by RIT for liability. During the summer before internship, the Program Faculty submits a list of those students who have been approved for internship to the appropriate RIT officials. There is no additional charge made to students for this coverage.

CRIMINAL BACKGROUND CHECKS

Some of our sites may require a criminal background check before students are allowed to do their internship with them. It is the students’ responsibility to acquire (pay for) the criminal background check before they are allowed to start their internship at that site, if it is required. The program director and clinical coordinator will have more information regarding sites that require it.

LIBRARY POLICY

Students must abide by the policies and rules of the Wallace Memorial Library (WML) regarding the use of their facility. No special privileges are given to students on internship at a distance from RIT. Therefore, any fines that are accrued must be paid.

Students are encouraged to use the library facilities at the clinical site when the patient load is light. Students must obtain permission from your Clinical Instructor in order to use the library. Students are not allowed to take time out of your clinical training to utilize the library for completing assignments or studying for exams. The affiliate library is only used when there are no patients in the clinic.

MAIL FOLDERS

All general handouts and other information for program students will be placed in the mail folders outside of the Department Offices on the first floor of the CBET or Building # 75. Each student in the program has a separate folder. Students are expected to check their mail folders frequently.
PREGNANCY
With confirmation of pregnancy by an accepted medical practice, students must notify the Clinical Coordinator in writing immediately. Students will be allowed to continue in the program only if a letter from a qualified obstetrician states that no danger exists for student and/or the fetal baby while performing internship duties. Additionally, maternal pregnancy leave time which must be approved by program faculty, must be made up. The clinical site utilized prior to the leave is NOT guaranteed upon the return from the maternity leave. If Students must leave the program for an extended time which exceeds the agreed upon maternity leave time and for other reasons, a position for internship will be provided on a space available basis upon petition for re-entry.

SUBSTANCE ABUSE
Substance abuse of any type, such as drugs or alcohol, will not be tolerated during any part of this Program. Possession of, or partaking in, any such substance during the didactic or clinical phase of this Program will be grounds for dismissal from the Diagnostic Medical Sonography Program.

SMOKING
Students are NOT to smoke at any time during clinical hours, except in designated areas assigned by the clinical affiliate. Students are expected to comply with the affiliates smoking policies and rules. If these restrictions are ignored, students will be removed from the affiliate, with appropriate hours deducted from your clinical time.

HIPAA TRAINING
Students must complete a HIPAA training course before they begin their clinical rotations. The certificate of completion is to be submitted to the Clinical Coordinator before the start of the clinical rotations. Some clinical sites may require additional documentation of HIPAA completion. This will be done at each clinical site’s discretion.

TARDINESS
Every attempt MUST be made to be on time every day. Unexcused tardiness in the Program will not be tolerated. The Clinical Instructors in conjunction with the RIT Program Faculty will monitor tardiness. Chronic tardiness (late more than 15 minutes for three or more times in one quarter) will result in the entire course grade being lowered by one full letter grade for every three (3) offenses.
CELL PHONE
Cell phones MUST be on silent and put away when entering the ultrasound department. It is not allowed to use the cell phone during clinical time. If needed, the cell phone can ONLY be used during break/lunch time. NO EXCEPTIONS.

DRESS CODE
The following dress code is enforced to promote a professional and safe working environment. An overall neat and professional appearance should be maintained throughout the year. Students may be involved in some lifting, moving, and reaching around patients, therefore, comfort and mobility need to be a consideration when selecting a wardrobe. Unless otherwise specified by an affiliate, the dress code for students is as follows:

General: Lab Coats (white) must be worn with university nametags clearly displayed at all times. All clothing must be in good repair, conservative in nature, and professional in taste. For the student’s safety, long hair should be pulled back and kept out of the way. Fingernails need to be kept short and neatly trimmed. Jewelry and rings should be conservative in nature and kept to minimum. This is for the patient and student’s safety. No loose or sharp objects should be worn. Scrubs are NOT permitted to be worn on a daily basis. There will be times when the hospital may require students to wear them (to go to the OR or into the unit), but this is the ONLY time they are acceptable.

Gentlemen must wear slacks (or chinos), dress shirts (tie optional), and dress shoes (comfortable dress shoes are recommended, sneakers only if approved by clinical affiliate). No tee shirts, denim pants, or blue jeans allowed. Strong or excessive cologne should be avoided. Beards and Mustaches must be neatly trimmed.

Ladies should adhere to business casual attire. Slacks, or skirts, with a modest blouse or shirt are recommended for best comfort. Skirt length should extend to or below the knees. No low cut blouses, low rise pants, miniskirts, denim pants, blue jeans, or tee shirts are allowed. Sensible, comfortable shoes should be worn. High heels are not acceptable for safety reasons. Strong or excessive perfume should be avoided. Artificial nails or excessively long natural finger nails must also be avoided.

BODY PIERCING
There is always a need for professionalism when in the clinical setting. This may require that you adhere to special regulations regarding jewelry and body piercing. The program supports this and it will be required that you remove all non-earlobe piercings in order to attend clinical. Some clinical sites may also limit the size and number of earrings. This will be determined on a site by site basis, and it is up to the student to adhere to these rules. Knowing that new piercings need a minimum of 6 weeks to heal before removal, it is the recommendation of the program to abstain from new piercings until the clinical rotations are completed.
**DRIVER’S LICENSE, CAR AND DRIVERS INSURANCE**

It is the sole responsibility of the student to find transportation to and from their clinical site. The program faculty and staff will do their best to take into account those who need to use public transportation, with advanced notification, but cannot take into account the lack of a driver’s license, car, insurance, or any legal issues that may ensue from driving illegally to or from your clinical internship. The student is also responsible for any parking fees or fees associated with parking tickets or violations that are incurred while on clinical internship at their assigned site.

If students are found not adhering to the above guidelines they will be immediately removed from the affiliate until the problem is corrected. The Clinical Instructor, with the approval of the Program Director/Clinical Coordinator, reserves the right to send students out of the clinical site to change their attire. The appropriate hours will be deducted from their clinical time.

**TRAVEL POLICY**

There is needed travel to the clinical sites during the 4th year of the Diagnostic Medical Sonography program. This is an expense that is to be absorbed by the student, and there is no direct reimbursement from the university (RIT) for this expense. It is the responsibility of the student to make the necessary arrangements to get to and from their clinical assignment each day, and also to get to and from campus for the required returns to campus for the program. These expenses may include, but are not limited to: car expenses, gasoline, parking fees and permits, tolls, airfare and luggage fees, cab fares and public transportation fees. Where as the program with work with all students to make the burden of these expenses as minimal for all equally, there is no guarantee that the program faculty and staff will be able to meet all of the students needs to completely reduce all of these expenses.

The program will however, need the express written consent from any student who wishes to travel to a site outside of NY where airfare travel will be necessary. All students who wish to pursue a clinical rotation site outside of NY will be individually counseled by the clinical coordinator as to the extenuating expenses that the student must incur in order to have a rotation outside of NY. All of these rotations will be voluntary.
The Society of Diagnostic Medical Sonography has published a Code of Ethics for the Diagnostic Medical Sonographers. As future sonographers it is important to be familiar with the professional Code of Ethics prior to assuming the sonographer responsibilities in the real world. The RIT Diagnostic Medical Sonography Echocardiography Program has adopted this Code of Ethics. It is your responsibility to familiarize yourself with the Code of Ethics before entering your clinical rotations.

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

- To create and encourage an environment where professional and ethical issues are discussed and addressed.
- To help the individual diagnostic medical sonographer identify ethical issues.
- 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:**

- Provide information to the patient about the purpose of the sonography procedure and respond to the patient's questions and concerns.
- Respect the patient's autonomy and the right to refuse the procedure.
- Recognize the patient's individuality and provide care in a non-judgmental and non-discriminatory manner.
- Promote the privacy, dignity and comfort of the patient by thoroughly explaining the examination, patient positioning and implementing proper draping techniques.
- 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)."
- 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:**

- Obtain appropriate diagnostic medical sonography education and clinical skills to ensure competence.
- 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); http://www.noca.org/ncca/ncca.htm or the International Organization for Standardization (ISO); http://www.iso.org/iso/en/ISOOnline.frontpage.
- Uphold professional standards by adhering to defined technical protocols and diagnostic criteria established by peer review.
- Acknowledge personal and legal limits, practice within the defined scope of practice, and assume responsibility for his/her actions.
- Maintain continued competence through lifelong learning, which includes continuing education, acquisition of specialty specific credentials and recredentialing.
- Perform medically indicated ultrasound studies, ordered by a licensed physician or their designated health care provider.
- Protect patients and/or study subjects by adhering to oversight and approval of investigational procedures, including documented informed consent.
- Refrain from the use of any substances that may alter judgment or skill and thereby compromise patient care.
- 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:**

- Be truthful and promote appropriate communications with patients and colleagues.
- Respect the rights of patients, colleagues and yourself.
- Avoid conflicts of interest and situations that exploit others or misrepresent information.
- Accurately represent his/her experience, education and credentialing.
- Promote equitable access to care.
- Collaborate with professional colleagues to create an environment that promotes communication and respect.
- Communicate and collaborate with others to promote ethical practice.
- Engage in ethical billing practices.
- Engage only in legal arrangements in the medical industry.
- 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.

**ADJUNCT FACULTY AND GUEST LECTURERS**

Adjunct Faculty and Guest Lecturers for the Diagnostic Medical Sonography Echocardiography Program are highly qualified physicians, sonographers, and other health care professionals who have been asked to lecture on specific topics. The Diagnostic Medical Sonography Echocardiography Program is quite fortunate to have the expertise and the time commitment of these individuals, so please be prompt, courteous, and attentive during their sessions.

**ACADEMIC GRIEVANCE**

The College of Health Sciences and Technology has developed definite procedures that are to be followed either in a case a student believes that a faculty member has improperly evaluated his/her work or has infringed upon his/her academic freedom, or in case any member of the academic community believes that a particular student has performed an act of academic or behavioral dishonesty or misconduct. Any student who feels that they have not been treated properly in any way needs to attempt to correct the situation with the individual(s) directly involved first. It is sincerely hoped that students will never be involved in this procedure; but if students are, the Program Director or the Associate Dean for Academic Affairs of the College of Health Sciences and Technology will familiarize students with the specifics of this policy. See Rochester Institute of Technology for details & procedures which can be found on the website (www.rit.edu/academicaffairs/policiesmanual/section D/D18.html)
CLINICAL ROTATIONS / INTERNSHIP

General Expectations for Clinical Rotations

The clinical rotations represent the integration and combination of the didactic and clinical phases of the Diagnostic Medical Sonography Echocardiography Program. A great deal of planning has gone into creating a learning environment that will allow the candidate to obtain the high level skills required for practice as a Diagnostic Cardiac Sonographer. The affiliates (hospitals and office-practices) where students will be placed are busy places offering a variety of services. It is the responsibility of the student to explore and learn as much as possible during this very important year. Students will be assigned a preceptor/clinical instructor for each rotation. In general, the student is expected to participate in each and every aspect of the department or office where students are assigned. Please remember that we are guests at the affiliate site. They have the right to remove students at any time. Please alert the Program faculty immediately if there are any questions or concerns that may arise regarding responsibilities, duties, or other aspects of the rotation.

The RIT Diagnostic Medical Sonography Echocardiography Program is fortunate to have the support of the local and neighboring medical communities for providing clinical sites offering a wide array of clinical experiences. Program faculty provides rotation assignments for all students. The Program cannot assure the student assignment to a clinical affiliate within the immediate Rochester area or other desired area. Several of these sites are located some distance from the RIT main campus. The Diagnostic Medical Sonography Echocardiography Program makes every attempt to assist the student in finding suitable housing. However, ultimately the responsibility for housing, travel, internet access, and food are the student's responsibility during this clinical year. Students are not reimbursed for expenses incurred during their time on clinical education. Senior students are considered full time students during this clinical training year and are responsible for tuition costs. Students are not remunerated during their time on clinical education. Students on clinical rotations are expected to be prompt and exhibit timeliness in all clinical activities; to demonstrate an understanding of responsibilities, expectations, and capabilities in all clinical settings and activities; to know limitations and adhere to guidelines of clinical practice of the Diagnostic Cardiac Sonography in all clinical settings and activities; to develop professional and cooperative working relationships with other healthcare professionals; to maintain OSHA standards of blood borne pathogens and infection control; and to maintain standards of the Health Insurance Portability and Accountability Act (HIPAA) in all clinical settings and activities.
STUDENT IDENTIFICATION

ALL Diagnostic Medical Sonography STUDENTS MUST BE CLEARLY IDENTIFIED AS Diagnostic Medical Sonography Echocardiography STUDENTS DURING ALL CLINICAL EXPERIENCES. The Diagnostic Medical Sonography Echocardiography Program provides all fourth year students with student identification badges. Clinical affiliates may require students to wear their institution’s identification badge as well as students’ RIT identification badge. If an ID badge should become lost or stolen, immediate replacement of that badge is the student's responsibility. Replacement badges must be ordered through the Program faculty at the student's cost.

PREREQUISITES FOR ENTRANCE TO THE CLINICAL ROTATIONS (FOURTH YEAR)

1. Grade Point Average - No student will be admitted to the clinical rotations without at least a 2.5 cumulative GPA.

2. Course Completion - Before the student may enter clinical rotations, all course requirements for the first through the third years must be completed. No student will be allowed to enter the clinical rotations year without completing all previous requirements, unless authorized by the Program Director. It is the student's responsibility to assure completion of all Program/RIT requirements. If the student is unable to enter the clinical rotations for any reason, continuation the next year will be on a space available basis, as determined by the Program Director.

3. Completion of Pre-Rotation Requirements & Health Form Update - Every student must have an Health Status Form on file in the Program office prior to beginning clinical rotations. This update is meant to provide evidence, as possible, that the student is in no way endangering the health of themselves and/or others in the clinical affiliate before entering clinical rotations. The Form will be provided to students before the end of the spring semester of the third year by the program faculty. Although the Diagnostic Medical Sonography Echocardiography Program cannot mandate that a student receive the Hepatitis B vaccine, it is VERY STRONGLY RECOMMENDED for the safety of the student. Other conditions may also apply for any given affiliate. No student will be permitted to enter the clinical rotations without this in place.

4. Pre-clinical Practical/Competency Evaluations - as stated previously, these examinations must be successfully completed in order to continue into the clinical rotations/internship phase.

EVALUATION OF CLINICAL ROTATIONS’ WORK

Clinical Evaluations and Grading

- These following objectives will serve many purposes:
- Guide students through their clinical rotations.

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- Used as a means to evaluate your clinical and didactic progress and proficiency.
- Guide the Clinical Instructor and the Program Director/Coordinator in assessing the students' performance during the particular quarter of study.

The clinical progress, proficiency, and attainment of these objectives will be monitored and checked by the Clinical Instructor and the Program Coordinator/Director. In order to get some feedback regarding your didactic performance while students are in your clinical rotations, these objectives will also be used as assignments to be completed and submitted to the Program Coordinator/Director in a timely fashion. Dates are posted along with topics in the lecture schedule.

All written and online assignments must be turned in **ON TIME!** For each week that an assignment is turned in late, students will be penalized by one letter grade. If homework is to be mailed, it MUST be postmarked on or before the due date to be considered on time. If homework is not legible, it will be returned and a penalty of one letter grade will be assigned. Assignments do not have to be typed as long as they are legible. Online examinations must be taken and submitted at the designated time.

Students should spend any idle time during the day reading, reviewing, and completing their assignment. Students must receive permission from the Clinical Instructor to have library time. It is **NOT** acceptable to replace scanning time to study for and take upcoming examinations or to complete assigned projects.

The final grade will be the average of the scores received on all objectives for each particular course.

**Student Clinical Evaluations**

Numerous evaluations will take place during your clinical rotations. Each evaluation, no matter what form, must be passed at the specified level of competency for continuation in the course. Sample evaluation forms are included in this Handbook.

The Clinical Instructor and Staff Sonographers will evaluate the clinical progress at each site of each rotation. Students will also be evaluated each rotation by the Program Concentration Coordinator by way of a scheduled patient examination (random clinical competency) selected by the Concentration Coordinator.

Staff sonographers will be asked to complete and sign two evaluation forms for each clinical rotation. On a regular basis, the Clinical Instructor will also be asked to complete and sign an evaluation form with you. This will provide students and Program faculty with a written record of your progress and proficiency. This evaluation should be discussed with students prior to
signing and should include ways in which students can improve their performance. Evaluations must be submitted on the dates specified on the class schedule. Students should take the initiative and remind yourself and your Clinical Instructors when the evaluations are due. The dates are provided in the lecture series schedules. Failure to complete and return any evaluation form will result in a course grade of "F."

The Clinical Instructor and Staff Sonographers should be aware that these evaluations must be returned to the RIT Concentration Coordinator/Program Director.

*No Evaluations = No Graduation!*

**Self-Appraisals**

Students will be required to complete and submit a self-appraisal form on the first day of each lecture series to which they are assigned. The intention of this form is to have students evaluate your own competency/comfort level in the clinical setting. The Program Director or Concentration Coordinator will advise if students have problems or concerns and suggestions will be made to make your clinical experience more meaningful and enjoyable. Failure to complete and return any self-appraisal forms will result in a course grade of "F."

**Attendance Records**

Students must report promptly to the department each day. Work hours are assigned by the hospital/clinic and not to exceed eight working hours per day, unless students wish to spend more time in the ultrasound department. The extra time spent in the ultrasound department post the designated hours cannot be used for make-up hours. Make-up time should be approved by the program faculty and the Clinical Instructor in advance.

An accurate weekly attendance record for absences during each rotation has to be signed by the Clinical Instructor and then returned to the Concentration Coordinator.

In the event of an anticipated long-term absence (more than six days), Students must inform the Clinical Instructor, Concentration Coordinator and the Program Director immediately. Students will be required to make up these days. This may be done at the end of the internship year or assigned school vacation times. Students should know that a total of 800 cases per specialty are required for a total minimum of 1,600 cases for registry eligibility. Students are responsible for reminding the Clinical Instructor to fill out and sign the attendance record sheet on a weekly basis. Failure to do that will result in an "F" grade.

*No Attendance Records = No Graduation!*
Clinical Absences

If students should find that they are unable to attend or will be late to the clinical affiliate, they must call the affiliate within thirty minutes of the opening of that department. If at all possible, notifications should be made at least one day in advance.

If students are absent from clinical because of illness, a snow day, or for personal reasons, this should be marked on the clinical absence form as “ILLNESS”, “PERSONAL” or “SNOW DAY” and signed by the Clinical Instructor. Both the Program Faculty and your Clinical Instructor must sign the Clinical Absence Form.

Clinical absence days need to be made-up if students exceed six (6) absences. The “Make-up Days” portion of the Attendance Notification Form must be completed for days that are made up, as well as a completion of the make up day Tally Sheet.

All days scheduled for breaks and holidays will be as shown on the class schedule included in the Student Sonographer Handbook. Please see the listings below to clarify what constitutes any of the possible clinical absences.

Sick Days

Students have a total of three (3) sick/personal days for your entire two semester internship. It is realized that on occasion students simply need a little time for themselves. It is not necessary for students to be physically ill to use a sick day. No physician note is required, unless students are absent for two or more days in a row because of an illness. In this situation, Students must obtain a note from your physician stating that they are able to return to work, and present no danger to the patient. Exceeding the limit of sick days will result in make-up days (usually only available in the fall and winter quarters or after graduation), lowering of grade, or denial of graduation. Other sick day policies may be indicated in individual course syllabus. **ANY OTHER TIME TAKEN OFF FOR ANY REASON, INCLUDING RESEARCH OR STUDY TIME WILL BE COUNTED AS SICK OR PERSONAL TIME UNLESS STUDENTS HAVE OBTAINED PRIOR CONSENT FROM EITHER THE PROGRAM DIRECTOR OR CLINICAL COORDINATOR.**

Snow Days

RIT has rarely closed due to snow. If a snow emergency should exist for RIT, radio stations in the Rochester area will announce it. If in doubt, call or check the RIT website. If students are on internship, and the geographic region students are attending officially announces a **snow emergency** and/or it is dangerous for the students to attempt to reach the affiliate, a snow day will be recognized. If your coworkers are making it to work, the students should be attempting it as well. There are many times when the weather is bad first thing in the morning, and then clears up within an hour or so once snow removal takes place. It is expected that students will
make every attempt to get to their clinical site, even if they will be an hour late. Please contact your clinical site and complete an Attendance Notification Form. A limit on snow days is not set. Recognized time off for snow emergencies will not be counted against required program internship hours as long as minimal program requirements are met. It is your responsibility to make every reasonable effort to attend your clinical internship in snowy weather. Improper use of snow days will result in one full letter grade reduction in each course involved.

Conferences
During your clinical year students may have the opportunity to attend one or more conferences related to the field of Diagnostic Medical Sonography. Students are allowed three (3) conference days during the clinical internship. (Prior consent from the Clinical Instructor and the Program Faculty is required.)

Interview Days
No more than two (2) interview days may be taken for the two semester academic internship year. It is strongly suggested that students save this time for the last quarter. Prior consent from the Clinical Instructor and the Program Faculty is strongly recommended.

Clinical Records
There are several records that should be kept and completed by students to confirm clinical experience. They are your only proof that you, the student, have been exposed to the proper amount and level of clinical experience. A brief description of how to complete the Log and Tally sheets is listed below. Make sure all required forms and documentation are submitted on time. For every day after the due date that the forms are submitted will result in a reduction of one full letter grade for the course. Failure to complete and submit these forms on time will result in a reduction of your clinical grade. Failure to complete and submit these forms will result in a grade of "F" for the course involved.

Tally Sheet
These are due during your return for each lecture series to RIT. It is recommended students fill these forms out at the end of each day at your clinical site. If students fall behind, it can be very difficult to try and backtrack from the department records.

When completing the Tally Sheets, please write a number in the appropriate box, not tally marks; i.e., "4" rather than "/". Do not use zeros when students have not done a particular type of exam; simply leave the box blank.

"Other" is for the unusual; for example, "left knee to evaluate for abscess." Write a de-
script of the "other" exam done on the back of the Tally Sheet with the date the exam was done. **DON'T FORGET TO FILL IN TOTALS, PLEASE!**

The Tally Sheets are required in order to prove to the accrediting/certifying organization the number of exams that students were exposed to. Students also need to be exposed to a certain number of exams to meet registry requirements. These forms are kept in their permanent record.

*No Tally Sheets = No Graduation!*

**Patient Log Sheets**

Patient Log Sheets are due during your return for each lecture series to RIT. Do not type or use ink when filling these out. These must be legible; students might need to make changes or corrections. Students should enter every patient they see--this means exams they review, observe, assist, or do solo. "Assist" means students have actually had their hands on the transducer, not that they took the linen off the bed. These log sheets prove that students have had the patient contact, which they claim to have had, so they must have all of the identifying features needed to go to the files and pull the case. However, no names should be included to protect patient confidentiality. Students also should make note of interesting cases in the ultrasound findings column with an asterisk. Please make sure the following items are included when completing the Patient Log sheets:

- Patient information including age, sex, and identification number.
- Patient history and current symptoms including lab values and explanatory notes.
- Type of exam ordered. (For example, abdomen, obstetrical, gynecology, etc.)
- Exam Indication. What are they trying to rule out, or determine from the examination. (For example, LVH, CHF, etc.)
- Follow-up information, if obtainable. (Pathology or surgery reports, further imaging like another ultrasound, Stress Test or Cardiac Cath, patient prognosis or if they are being referred back to their personal physician for treatment)
- Mark the Soloed, Assisted, Observed, or Reviewed box for each patient.

*The Log Sheets are required in order to prove to the accrediting body the type and history of the exams that students were exposed to. Make sure these are accurate and concise. These forms are also kept in your permanent record. Make sure your name is on EVERY page, or you may not receive credit.*

*No Log Sheets = No Graduation!*
**There is a lot of monthly paperwork that will be turned in. Failure to have this paperwork neatly STAPLED together, with your name on it and turned in at the given time can lead to a reduction in your clinical grade.**

CASE STUDIES

Students are required to present or submit case studies throughout your clinical rotations. The Case Studies are usually due when the rest of your required paperwork is due unless specified by the program faculty. Keep track of interesting cases or utilize your clinical sites teaching file for your case studies. Students do not have to be personally involved with the cases that they present, however students will be responsible for knowing about the anatomy/pathology and any other pertinent information in the case study that students present. Case study presentations should not be more than ten minutes in length. To protect patient confidentiality, the name must be obscured or removed from the films/images, otherwise, it will be a HIPPA violation and your grade will be affected. Your case studies must deal with different subject matter for each presentation.

Case studies must be in a Power Point Format. Failure to submit a case in such a format will result in an “F” for the assignment. Many of the clinical sites are now filmless and students can easily copy the needed images to a CD or a jump drive. If this is not the case and students only have films available, it is required that they contact the Concentration Coordinator to make arrangements to have the images scanned on campus. Failure to have images in your power point will result in a reduced grade. They must be filled out and accompany every case study the students submit.

Information that must be included in each case study power point presentation:

- History (age, sex, race, medical conditions)
- Physical findings
- Laboratory data
- Clinical impression
- Ultrasound findings
- Follow-up information
- Discussion of pathology
- Scanning techniques employed with rationale
- Discussion of current techniques and interpretations as obtained from at least three current articles or chapters in books. References must be sited. No EXCEPTIONS.
INSTITUTE WRITING POLICY

Students in the Diagnostic Medical Sonography Echocardiography Program must demonstrate that they have the writing skills needed for successful entry into medicine. Writing requirements must be completed prior to graduation. Students are expected to have writing proficiency in the following tasks: using appropriate English grammar and construction, organization, and scientific/medical language. Requirements are listed below:

Standard Test of Written English (waived if transferring English Composition);
  - English Composition course (GLLC 220);
  - Scientific or Medical Abstract (Formal Case Study Presentations);
  - Preparing a personal resume (C.V.) with a letter of inquiry;
  - Laboratory Report (Biology or chemistry labs, etc.);
  - Scientific Paper (Ultrasound Research Seminar Paper);
  - Computer Literacy (4006230 or transferred)

DELAY IN THE COURSE OF STUDY

If, for any reason, a student is unable to continue to the next year of study (including the clinical year), continuation in the Program will be at the discretion of the program faculty.

FOR EXAMPLE: If a student has not completed the pre-requisites for the fourth year of study (clinical rotations), the student may not be permitted to proceed to the following year.

LEAVE OF ABSENCE

Under special circumstances the Diagnostic Medical Sonography Echocardiography Program may grant a student an official leave of absence for personal, medical, or academic reasons for a period of time not to exceed one calendar year or five (5) academic quarters. The student must submit this request in writing to the Program Director. If the leave of absence is approved, the Program Director provides written notification to the student including applicable beginning and ending dates and an academic agreement to the student. Decisions concerning matriculation dates and special conditions pertaining to these leaves are the decision of the Diagnostic Medical Sonography Echocardiography Program faculty. The student then needs to initiate the appropriate formal paperwork for a leave of absence from the Diagnostic Medical Sonography Echocardiography Program. When a leave of absence is taken, the student may need to repeat some of the courses completed prior to the leave of absence. Any student who is granted a leave of absence is subject to changing standards within the curriculum that may necessitate
additional courses and/or additional time to complete the degree requirements. In all cases of leave of absence, the student is required to complete the full curriculum to be eligible to earn a certificate as a Diagnostic Medical Sonographer Echocardiography Certificate.

LECTURE SERIES/RECALL DAYS

Once every month, students will return to the RIT campus for a 3-day intensive lectures and examination sessions, and case presentations. Attendance at these classes is mandatory and tardiness is unacceptable. Any unexcused absence, as determined by the program faculty, may be cause for repeating that current rotation, in its entirety, at the conclusion of the year. Students must be in the assigned room by 8:50 am. Lecture series/Recall days will generally run from 9:00 am - 4:00 pm. Students should be prepared for a full day of events. It is imperative that senior students register for each of the four clinical rotation course sequences in the fall, winter, and spring quarters. Failure to do so may result in the student being pulled from the rotation and/or loss of financial aid.

ROTATION SITE VISITS

Students on clinical rotations will have site visits, performed by the Concentration Coordinator and/or other members of the program faculty, on a frequent basis throughout the senior year. Students may or may not be notified, in advance, of the Site Visit date. It is the student’s responsibility to be totally prepared for any Site Visit. This is important in ensuring quality time spent with program faculty during the site visitation. Students will be observed while scanning by the Concentration Coordinator or program faculty. Students’ performance will be evaluated based on the performance on clinical competencies/examinations and their involvement as a team member and professionalism as well.

UNPROFESSIONAL BEHAVIOR / CONDUCT

It is imperative that the Diagnostic Medical Sonography Echocardiography student use great caution and diplomacy when dealing with patients, clinical instructor, and/or other healthcare personnel. A student who is, in the judgment of the clinical instructor, acting in an unprofessional manner will be immediately removed from that clinical site. The dismissed student is not to return to the clinical site until informed by the Program Director to do so. The clinical instructor will notify the Concentration Coordinator as to the nature of the students behavior and reason(s) for dismissing the student from the clinical experience. If, after investigation, the Program Director determines that the student's behavior was inappropriate, the student will then appear before the Diagnostic Medical Sonography Echocardiography Program faculty. THE PROGRAM FACULTY has the authority to:* warn the student, and/or recommend any remed-
al activities, or have the student repeat the rotation satisfactorily at the conclusion of the year, prior to receipt of their degree, or have the student dismissed from the Program.

A student may be dismissed from enrollment in the Diagnostic Medical Sonography Echocardiography Program if, in the opinion of the Program faculty & administration, his/her knowledge, character, or mental or physical fitness cast grave doubts upon his/her capabilities as a Diagnostic Cardiac Sonographer. Any student who exhibits personal characteristics which seem inappropriate to one seeking to become a Diagnostic Cardiac Sonographer will be considered for dismissal from the program. It is not possible to enumerate all forms of inappropriate or unprofessional behavior which could raise serious questions concerning a student's status as a health professional in training. The following, however, are examples of behavior which could constitute a violation of such professional standards: conviction of a felony; placing a patient in needless jeopardy; unethical disclosure of privileged or confidential information; falsifying documentation or patient information; abusive or disrespectful conduct towards members of the faculty, administration or professional staff, employees, students, hospital visitors, or patients; violation of any established rules and regulations of RIT or any affiliated institution.

PHYSICS BOARD

All students will be required to sit for the National Certifying Physics examination prior to their graduation from the program. It is required that all students take this examination no later than the first week of April of their internship year. All details and preparation for this examination will be added by the program faculty. **NO EXCEPTIONS.**

EXAMINATIONS

All examinations (online or written) must be taken at the designated time. If special accommodations are needed to take the examinations, it must be arranged at a time outside the clinical and didactical time. A student must consult with the program faculty and obtain approval. **NO EXCEPTIONS.**
Scanning Consent Form

Please read the following statements regarding the use of ultrasound instrumentation in the laboratory. Sign the consent form only after you have read and understand the following statements.

1. The scheduled laboratory sessions will involve students practicing scanning techniques on each other using diagnostic ultrasound instrumentation. The scanning will take place under the direct supervision of the Program Director, Concentration Coordinator, or other designee of the Program.

2. I have been informed and understand that during the past twenty years there have been no known harmful effects caused by diagnostic ultrasound to either the patient or the operator. Should any deleterious effects be established in the future I release the Rochester Institute of Technology and its faculty and staff of all liability.

3. I understand that my nonparticipation or withdrawal as a “patient” being scanned from the laboratory sessions in no way influences my course grade, if I am currently a student registered for the class.

4. I understand that my participation as a "patient" being scanned is not essential for completion of the course, if I am currently a student registered in the class, although I recognize that such participation will teach me technical scanning skills necessary for my internship year.

5. I understand that RIT’s Diagnostic Medical Sonography Echocardiography Program faculty and staff are not physicians and/or legal diagnosticians. If pathology is discovered during scanning laboratories, I understand that it is my sole responsibility to seek medical advice/treatment from the appropriate health care professional.

6. I have had the opportunity to ask questions which have been answered to my satisfaction.

Having read and understood the above statements, I agree to participate as a “patient” for the Diagnostic Medical Sonography Echocardiography program. I also understand that I may be asked to be scanned by any/all student sonographers during the course of the Clinical Laboratory for the sole purpose of ultrasound education.

Signature of Student ___________________________ Date _____________________

Student Name (Please Print) ____________________________________________

Diagnostic Medical Sonography Program
College of Health Sciences and Technology
Rochester Institute of Technology
Scanning Consent Form for Outside People

Please read the following statements regarding the use of ultrasound instrumentation in the laboratory. Sign the consent form only after you have read and understand the following statements.

I take full responsibility to make sure that the people who I bring into the scanning laboratory, who are not a part of the program, are aware of the following before I begin scanning them:

1. I have been informed and understand that during the past twenty years there have been no known harmful effects caused by diagnostic ultrasound to either the patient or the operator. Should any deleterious effects be established in the future, I release the Rochester Institute of Technology and its faculty and staff of all liability.

2. I understand that RIT’s Diagnostic Medical Sonography Echocardiography Program faculty and staff are not physicians and/or legal diagnosticians. If pathology is discovered during scanning laboratories, I understand that it is my sole responsibility, and the person being scanned responsibility, to seek medical advice/treatment from the appropriate health care professional.

3. I will not scan any women who are pregnant unless it has been discussed and approved by the Program Director or Concentration Coordinator of the Diagnostic Medical Sonography Echocardiography program. No pregnant woman is allowed to be scanned unless she has been medically cleared by her personal physician.

4. I have had the opportunity to ask questions regarding the above procedures, which have been answered to my satisfaction.

Signature of Student __________________________________ Date ____________________

Student Name (Please Print) ___________________________________________________

Diagnostic Medical Sonography Echocardiography Program
College of Health Sciences and Technology
Rochester Institute of Technology
Student Training Agreement

It is the objective of this form, to provide verification to the faculty and staff of the Diagnostic Medical Sonography Echocardiography Program at the Rochester Institute of Technology, that by signing below, the student agrees that he/she has read, and understands the policies, procedures, and guidelines set forth in the Student Policies and Procedures Handbook.

By signing this form, the student agrees to be bound by the terms of the policies and procedures that have been outlined in the provided handbook.

______________________________________________
Student Signature

______________________________________________
Print Name

Dated

Sign and returned to the program faculty no later than end of September 2015