# **Quinnipiac**School of Health Sciences

# Mission Statement and Goals of the Diagnostic Medical Sonography Program

The Quinnipiac University Diagnostic Medical Sonography Program supports the mission statement of both Quinnipiac University and the School of Health Sciences and their commitment to excellence in education. The mission of the Diagnostic Medical Sonography Program at Quinnipiac University is to provide a quality and comprehensive education, through didactic, laboratory and clinical experiences, that will prepare students to become multi-credentialed sonographers.

The objectives of the program are as follows:

Program Goal #1: The students will be clinically competent.

- Student Learning Outcomes:
  - o Students will be clinically knowledgeable
  - o Students will demonstrate procedural knowledge

Program Goal #2: The students will demonstrate effective communication skills.

- Student Learning Outcomes:
  - o Students will demonstrate effective communication skills with patients
  - Students will demonstrate presentation skills in both oral and written formats

Program Goal #3: The students will demonstrate critical thinking.

- Student Learning Outcomes:
  - o Students will be able to perform non-routine procedures
  - o Students will evaluate images for diagnostic quality

Program Goal #4: The students will grow as professionals.

- Student Learning Outcomes:
  - Students will exhibit professional behaviors
  - o Students will understand ethical decision making

## School of Health Sciences

#### **Technical Standards**

In order to perform the tasks required of a diagnostic medical sonographer, certain technical standards are required. Students must demonstrate the ability to perform required functions as a routine part of either classroom, laboratory or clinical education. Students should be aware that successful completion of the Diagnostic Medical Sonography Program will depend upon the ability to meet the following technical standards:

Every student in the Diagnostic Medical Sonography program must possess the ability to learn and perform the following competencies and skills:

Motor: The student possesses sufficient motor capabilities to execute the movements and skills required to provide sonography. These include, but are not limited to:

- 1. Ability to adjust and position equipment and patients, which involves bending or stooping freely to floor level and reaching above the head.
- 2. Ability to move or position equipment and patients, which involves lifting, carrying, pulling, and no weight lifting restrictions.
- 3. Have the endurance to complete all required tasks during the assigned period of clinical practice in order to carry out the sonography process in the context of patient care delivery.
- 4. Ambulate independently for the assigned period of clinical practice.
- 5. Reach up to six (6) feet off the floor.
- 6. Lift thirty (30) pounds of weight up, and over the level of head.
- 7. Coordination, speed and agility to assist and safely guard, with safe and proper body mechanics, patients who are ambulating, transferring, or performing other activities.
- 8. Ability to guide, resist, and assist patients, or to provide emergency care, which involves the activities of standing, kneeling, sitting, or walking.
- 9. Use fine motor skills and manual dexterity in manipulating a wide range of sonographic and medical equipment and peripherals.
- 10. Possess the manual dexterity and coordination to manipulate small knobs and toggle switches and control accessory equipment.
- 11. Use either and/or both hands for scanning and equipment manipulation.
- 12. Stand for protracted periods of time without a break.
- 13. Successfully complete a Cardio-Pulmonary Resuscitation (CPR) certification course for **Health Care Providers**; which should include Adult, Pediatric and AED.
- 14. Ability to administer CPR without assistance.
- 15. Ability to perform physical capabilities and practice correct ergonomics as indicated by Society of Diagnostic Medical Sonography, OSHA, CDC and JCAHO. Students must review the Industry Standards for Prevention of Work-Related Musculoskeletal Disorders by the SDMS, as well as OSHA, CDC and JCAHO publications on musculoskeletal

#### School of Health Sciences

injuries as they relate to the sonographer. Information and additional links can be found at the following link: http://www.sdms.org/resources/careers/musculoskeletal-injury.

Sensory: The student possesses the ability to obtain information in classroom, laboratory or clinical settings through observations and other measures, including but not limited to:

- 1. Visual ability to discriminate color changes, to see slight differences in shapes and objects, to read or set parameters on various equipment, and to interpret and assess the environment.
- 2. Visual ability to recognize and interpret facial expressions and body language, and to identify normal and abnormal patterns of movement.
- 3. Visual ability to discriminate between blacks, grays, whites, and the entire color spectrum on various display devices.
- 4. Observe patients at a distance or via television monitor.
- 5. Visually monitor patients in dimly lit environments.
- 6. Auditory ability to recognize and respond to soft voices, auditory timers, equipment alarms, call bells, and to effectively use devices for measurement of blood pressure, breath sounds, etc.
- 7. Audibly monitor patient conditions.
- 8. Auditory ability to discriminate between subtle tones in stereo produced by various types of Doppler instrumentation.
- 9. Tactile ability to palpate a pulse and to detect changes or abnormalities of surface texture, skin temperature, body contour, muscle tone, and joint movement.
- 10. Sufficient position, movement and balance sensations to assist and safely guard patients who are ambulating, transferring or performing other activities.

Communication: The student utilizes effective communication with peers, faculty, and other healthcare providers. Communication competencies include knowledge, attitude, and skills necessary to provide quality and safe patient care in all healthcare settings. This includes, but is not limited to:

- 1. Ability to read (in English) at a competency level that allows one to carry out the essential functions of an assignment (examples: handwritten data, printed policy and procedure manuals).
- 2. Ability to effectively interpret and process information.
- 3. Ability to effectively and efficiently communicate (verbally and in writing) with patients/families, healthcare professionals and others within the community under stressful conditions.
- 4. Accurately elicit information from patients, family member/significant others, health team members, and/or faculty related to a patient's medical history and current status necessary to adequately and effectively evaluate a patient's condition.

## School of Health Sciences

- 5. Effectively interact with individuals and communicate their needs promptly and effectively, as may be necessary in the patient's interest.
- 6. Effectively collaborate with physicians and other members of the healthcare team, and provide an oral or written summary of the technical findings to the physician for medical diagnosis.
- 7. Ability to access information and to communicate and document effectively via computer.
- 8. Ability to recognize, interpret, and respond to nonverbal behavior of self and others.

Behavioral/Social: The student must be able to exercise good judgment and tolerate contact with a diverse population, including people of all ages, races, socioeconomic and ethnic backgrounds, and medical or mental health problems. This also includes, but is not limited to:

- 1. Ability to work with multiple patients and colleagues at the same time.
- 2. Ability to work with classmates, instructors, healthcare providers, patients, and others under stressful conditions, including but not limited to providing care to medically or emotionally unstable individuals, situations requiring rapid adaptations, the provision of CPR, or other emergency interventions.
- 3. Possess the emotional stability to function effectively under stress and to adapt to an environment that may change rapidly, without warning, and/or in unpredictable ways.
- 4. Ability to work effectively, respectfully and professionally as part of the healthcare team, and to interact with patients, their families, and health care personnel in a courteous, professional, and respectful manner.
- 5. Possess sufficient interpersonal skills to interact positively with people from all levels of society, and all ethnic and religious backgrounds.
- 6. Possess a high level of compassion for others, motivation to serve, integrity, and a consciousness of social values.
- 7. Ability to foster and maintain cooperative and collegial relationships with classmates, instructors, other healthcare providers and patients.
- 8. Ability to contribute to collaborative, constructive learning environments; accept constructive feedback from others; and take personal responsibility for making appropriate positive changes.
- 9. Possess attributes that include compassion, empathy, altruism, integrity, responsibility, and tolerance.
- 10. Ability to recognize limitations in their knowledge, skills and abilities and to seek appropriate assistance with their identified limitations.

Intellectual/Critical Thinking: The student possesses sufficient abilities in the areas of calculation, critical problem solving, reasoning, and judgment to be able to comprehend and process information within a reasonable time frame as determined by the faculty and the profession. The student must be able to prioritize, organize, and attend to tasks and responsibilities efficiently. This includes, but is not limited to:

## School of Health Sciences

- 1. Ability to measure, collect, interpret, and analyze written, verbal, and observed data about clients.
- 2. Ability to prioritize multiple tasks, integrate information and make decisions in a prompt and timely fashion.
- 3. Ability to apply the principles, indications, and contraindications for sonography.
- 4. Ability to comprehend multi-dimensional relationships and the spatial relationships of anatomic structures.
- 5. Ability to act safely and ethically in the classroom, laboratory and in clinical setting.
- 6. Effective use of problem solving skills including conceptual, integrative and quantitative abilities.

Note: All students must be capable of performing the technical standards as listed above, with or without a reasonable accommodation. Failure to perform the program's essential technical standards shall result in a student's removal from the program.

A main goal of a competent Diagnostic Medical Sonographer is the deliverance of quality patient care and useful diagnostic information. Below is a list of some of the practice standards of the profession in basic terms.

However, the student is responsible for reading and reviewing the entire "Scope of Practice and Clinical Standards for the Diagnostic Medical Sonographer," located at

http://www.sdms.org/docs/default-source/Resources/scope-of-practice-and-clinical-standards.pdf, and agree to compliance with the statements as part of the program.

## School of Health Sciences

#### Clinical Performance Standards

- 1. The practitioner collects pertinent data about the patient and about the procedure.
- 2. The practitioner analyzes the information obtained during the assessment phase and develops an action plan for completing the procedure.
- 3. The practitioner provides information about the procedure to the patient, significant others and other health care providers.
- 4. The practitioner implements the action plan
- 5. The practitioner determines whether the goals of the action plan have been achieved, and implements revised action plans if necessary.
- 6. The practitioner reviews and evaluated the outcome of the procedure.
- 7. The practitioner documents information about patient care, the procedure, and the final outcome.
- 8. The practitioner collects pertinent information regarding equipment, the procedures, and the work environment.
- 9. The practitioner analyzes information collected during the assessment phase and determines whether changes need to be made to equipment, procedures, or the work environment.
- 10. The practitioner informs patients, the public, and other health providers about procedures, equipment, and facilities.
- 11. The practitioner performs quality assurance activities or acquires information on equipment and materials.
- 12. The practitioner evaluated quality assurance results and establishes an appropriate action plan.
- 13. The practitioner implements the quality assurance action plan.
- 14. The practitioner assesses the outcome of the quality assurance plan in accordance with established guidelines.
- 15. The practitioner documents quality assurance activities and results.
- 16. The practitioner strives to provide optimal care to all patients.
- 17. The practitioner evaluates personal performance, knowledge, and skills.
- 18. The practitioner acquires and maintains current knowledge in clinical practice.
- 19. The practitioner promotes a positive collaborative practice atmosphere with other members of the health care team.
- 20. The practitioner adheres to the profession's Code of Ethics.
- 21. The practitioner participates in the acquisition, dissemination, and advancement of the professional knowledge base.

## School of Health Sciences

#### Responsibilities of the Student

- 1. Maintain an acceptable, professional appearance at all times. Students are expected to comply with the dress code policies of the Diagnostic Medical Sonography Program, Quinnipiac University, and each clinical affiliate (see Dress Code section of this handbook).
- 2. Establish good working relationships with all personnel with whom you have contact.
- 3. Be responsible for all equipment and materials used during laboratory and clinic hours.
- 4. Gain respect of your colleagues through professional and dignified posture.
- 5. Attend and participate in all scheduled classes, laboratories and clinical activities.
- 6. Consult with clinical staff, technologists, floor supervisors, and/or university faculty for
- 1. help with problems.
- 7. Participate in the evaluation of your clinical and academic progress in conjunction with the clinical instructors and program staff at the Clinical Education Centers and the university faculty.
- 8. Utilize E\*Value to maintain accurate, up-to-date clinical record logs and competency evaluations. Be aware of the number and types of evaluations required during each academic semester.
- 9. Clinic is a learning situation with many ideas and suggestions provided through the observation of other professionals in the field of Diagnostic Medical Sonography.
- 10. Strive to broaden your own knowledge and background on subject matters by utilizing course resources and reading the professional literature available.
- 11. Initiate a forum with your clinical instructors and/or liaison to rectify any issues related to professional interactions that you feel are impacting your clinical experience. The student should utilize the Student Grievance form provided in this handbook, and remit to the Director of Clinical Education (Attachment N).
- 12. Responsible for completion of assigned assignments related to didactic, laboratory and clinical education.
- 13. Be responsible for checking Quinnipiac University email on a consistent basis throughout the academic year including summer.
- 14. Thoroughly read and understand all policies and guidelines included in the Quinnipiac University Diagnostic Medical Sonography Student Handbook.

## School of Health Sciences

#### **Program Requirements**

- 1. Prior to admission into the clinical component, students must:
  - Meet a minimal overall GPA of 2.85
  - Successfully complete with a C- or better:
    - o BI 101, BI 102, or approved transfer equivalent
  - Successfully complete MA 275
  - Successfully complete Physics 101
  - Successfully complete all outcomes of DMS 100 and 101 (programmatic GPA of 3.0)
- 2. For students admitted into clinical component the following items are due to be submitted to Certiphi Screening Company by June 30th.
  - Up to date CPR certification
  - Background check through Certiphi- Approximately \$60, (subject to change).
  - Drug Screening through Certiphi Approximately \$35, (subject to change).
  - PPD, HBV and updated copy of medical records including vaccinations and titers, through Certiphi's, My Record Tracker- Approximately-\$30, (subject to change).

\*\*\*Students are responsible to make an appointment with their Physician allowing ample time for the required vaccinations, titers; as well as all requirements listed on the Health Form packet before the end of March. The Hepatitis B vaccine is a 3 part series, which takes approximately 6 months; so please plan accordingly.

- 3. Following admission into the clinical component, the student must:
  - Agree to follow all rules and regulations as stated in the Diagnostic Medical Sonography Student Handbook (issued during fall orientations).
  - Achieve a programmatic GPA of 3.0 in all DMS courses. Maintain an overall GPA of
  - 2.85. Complete all clinical course requirements. A student that does not meet these requirements must appear before the Diagnostic Imaging Department's Academic Standing and Progress Committee. If the student does not meet the terms set forth by the Diagnostic Imaging Department's Academic Standing and Progress Committee, the student may be subject to dismissal from the program.
  - Assume responsibility for securing individual transportation to and from all clinical education settings.
  - Pay a clinical education fee of approximately \$600.00 per semester.
  - Register for the EVALUE, clinical record logging.
  - Reveal any known allergies, which may impede a student from performing safely in a healthcare or laboratory environment. An example would be a Latex allergy.

## School of Health Sciences

#### Health Requirements

All students entering the Diagnostic Medical Sonography Program must be in good health and free of communicable disease. Prior to entering the program, the student must show proof of:

- Recent (within six months and within the calendar year of entering the program) complete physical examination with vision testing for color blindness
- Measles-Mumps-Rubella (MMR) vaccine both dose 1 and 2
- Tetanus-Diphtheria-Pertussis vaccine must be within 10 years and be current until date of graduation
- Hepatitis B vaccine doses 1, 2 and 3
- Polio vaccine
- Purified Protein Derivative (PPD) or negative chest X-ray within two months of entering DMS program

#### **Titers**

As part of the Quinnipiac University Clinical Affiliation Agreement and in an effort to protect students and the patients they care for, prior to entering the program DMS students are required to show proof of titer for each of the following:

- Rubella
- Measles (Rubeola)
- Mumps
- Varicella
- Hepatitis B

All health requirements are collected and reviewed by the University's electronic health record collection and storage service on a regular basis and students are notified of any deficiencies. It is the student's responsibility to see that all health requirements including immunizations and titers are up to date. No student will be allowed to matriculate in the program, participate in a clinical experience or in any class where there is the potential for exposure to blood and airborne pathogens without proof of physical exam, immunizations and titers. No one will be permitted to begin clinical contact without documentation of physical exam, immunizations and immunity (including the requested titers).

#### **Immunization Policy**

If a student is unable to confirm immunization status or unable to obtain immunizations due to personal, religious or medical reasons, the Quinnipiac DMS Program cannot guarantee the student's placement at a clinical site and may limit the student's ability to successfully complete and graduate from the program. Completion of all clinical rotations is required for successful completion of the program.

# **Quinnipiac**School of Health Sciences

#### **Influenza Vaccination**

The DMS program requires all students to obtain the influenza vaccine in the fall of their second year, as well as every fall in which the student is participating in the clinic. If a student is unable to receive the influenza vaccine, they are required to complete the University influenza vaccination declination form. By declining the influenza vaccine, the student acknowledges that clinical placement may be limited or denied due to the requirements for influenza vaccine by clinical affiliates.

#### Health/Medical Insurance Policy

All QU Diagnostic Medical Sonography students must maintain health/medical insurance through the University. Students must show proof of health care coverage, as well as maintain coverage for the entire program. Students must purchase health insurance through the University insurance agent unless they can show proof of other adequate coverage.

#### **Summary of Program specific fees:**

Item	Fee
Certiphi Background check*, initial	\$60
Certiphi Background check, annual renewal	\$24.50
Certiphi Drug Screen	\$32
Electronic Health Record, initial	\$30
Electronic Health Record, annual renewal	\$10
E-Value clinical tracking system	\$90 per year
Program required uniform	See bookstore for pricing

Fees subject to change