



DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM

MINIMUM TECHNICAL STANDARDS FOR ADMISSION AND CONTINUATION

Read this information sheet carefully and retain it for your records.

Introduction

Diagnostic Medical Sonographers are an integral part of the medical imaging profession. Using high-frequency sound waves, they gather information that helps diagnose a wide range of pathologies and diseases, provide patient care by producing diagnostic ultrasound images, and assist with interventional procedures. This work requires a range of physical movements to care for patients and manipulate heavy equipment, along with the cognitive, psychomotor, and affective skills described below.

SUNY Downstate's policies are in accordance with federal and state laws and regulations prohibiting discrimination and harassment. These laws include the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, Title VII of the Civil Rights Act of 1964 as amended by the Equal Employment Opportunity Act of 1972, and the New York State Human Rights Law. These laws prohibit discrimination and harassment, including sexual harassment and sexual violence.

The Program does not discriminate against qualified individuals with disabilities. At the same time, students must be able to perform the Program's essential functions and meet certain minimum academic and technical standards that reflect industry requirements and the common functions of both a Diagnostic Medical Sonography student and a practicing sonographer. All incoming and returning students must acknowledge their ability to meet the technical standards set forth below, with or without reasonable accommodation, as these standards are necessary for admission, continuance, and successful completion of the Program.

Technical Standards

Candidates for the Diagnostic Medical Sonography Certificate Program must have the intellectual ability to learn, integrate, analyze, and synthesize data; functional use of vision, hearing, and equilibrium; and the motor function needed for both coursework and patient care.

Applicants to the program must possess the following capabilities, attributes, and skills:

- Observation
- Communication
- Motor Coordination and Strength
- Intellectual abilities, including conceptual, integrative, and quantitative reasoning
- Behavioral and Social Attributes

1. Observation

Observation is required for lecture and lab demonstrations, and for discriminating shades of black, gray, and white and the color combinations that indicate blood flow and hemodynamics on display devices and recorded images — critical skills for scan interpretation.

2. Communication

Students must communicate effectively through speech, reading, and writing, and be able to hear and observe clinical staff and patients to elicit information, perceive nonverbal cues, describe changes in mood or posture, and recognize and respond to emergencies.

They must also communicate orally and in writing with physicians, faculty, peers, and other healthcare professionals — which requires sufficient auditory perception to receive communication from all of them in both routine and emergency situations.

3. Motor Coordination and Strength

Diagnostic Medical Sonography students must have the gross and fine motor function, manual dexterity, and physical strength to:

- Apply general care and emergency treatment to patients.
- Help lift patients between a wheelchair or bed and the examination table (up to 10–25 times per day), and routinely lift or move objects or instruments weighing 50 pounds or more.
- Manipulate ultrasound equipment, computers, and peripherals.
- Move with sufficient mobility to position patients for diagnostic-quality images.
- Push and maneuver ultrasound imaging equipment alongside patient equipment during mobile procedures on the nursing unit.
- Perform the steps of a sonographic examination accurately and in sequence.
- See and function adequately in a semi-dark environment.
- Distinguish audible sounds well enough to interpret Doppler shifts and color designations on display devices, film, and paper images.
- Stand for approximately 80% of the workday, with full, coordinated use of the hands, wrists, and shoulders, equilibrium, and sensation.

4. Intellectual Abilities

Sonography students need conceptual, integrative, and quantitative abilities to comprehend multi-dimensional and spatial relationships among anatomic structures, and to measure, calculate, reason, analyze, and synthesize data. These abilities underlie the problem-solving and diagnosis — including obtaining, interpreting, and documenting data — that the profession demands.

Students must maintain professional conduct and appearance, protect client confidentiality, and operate within their scope of practice. They must act assertively, delegate appropriately, function as part of a medical team, and recognize the limits of their own skills and authority, seeking supervision when needed.

5. Behavioral and Social Attributes

Students must be emotionally healthy, use sound judgment to fulfill the responsibilities of obtaining a quality ultrasound study and providing patient care, build mature and effective relationships with patients and colleagues, and tolerate physical and emotional stress without loss of function.

They must be adaptable and flexible enough to function amid uncertainty, with a high level of empathy, motivation to serve, integrity, and social awareness, plus the interpersonal skills to interact positively with people of all backgrounds — even under a heavy workload.

Students must minimize ultrasound exposure to patients, themselves, and others, and consistently demonstrate honest, compassionate, ethical behavior toward coworkers, preceptors, faculty, patients, patients' families, and other stakeholders in healthcare training and delivery.

Conclusion

The Diagnostic Medical Sonography Program and SUNY Downstate will continue seeking creative ways to open the program to qualified, competitive individuals with disabilities, without compromising curriculum integrity, essential elements of the field, or patient health and safety. An applicant or student who cannot meet the standards above is not qualified to practice the profession.

Acknowledgment

I have read, understand, and agree to the technical standards described above.

Signature

Date