

## Diagnostic Medical Sonography Program

### Technical Standards for the Diagnostic Medical Sonography Program

Technical standards are a group of minimum expectations that incorporate observation, communication, and cognitive, behavioral, and motor skills, as recommended by the Society of Diagnostic Medical Sonography. These expectations are set forth so that the DMS student can perform the common duties required of a Diagnostic Medical Sonographer in a professional setting. Students must verify that they meet the technical standards described below at the time of matriculation into the program.

#### **OBSERVATION**

- Distinguish multiple shades of gray to differentiate types of tissue and normal tissue from abnormal pathologies.
- Detect different colors to distinguish tissue, organ boundaries, and/or Doppler flow patterns.
- Observe sonographers demonstrating scanning skills, patient manipulations, and delivering effective patient care.
- Observe patients for signs of distress and/or to detect needs for assistance both near and far in an environment with limited lighting.
- Have the visual ability to read electronic and paper charts, evaluate images, and observe the condition of the patient.
- Adequately view sonograms, can perceive small details as well as to distinguish subtle differences in tissue, sounds, and/or blood flow dynamics.

#### **COMMUNICATION**

- Communicate in English (verbally and in writing) to patients, caregivers, and healthcare workers.
- Hear and communicate instructions and explanations to patients and/or caregivers in a clear and compassionate manner and be able to perceive nonverbal communication.
- Recognize, respond, and communicate properly when faced with an urgent or emergency.
- Read and analyze a patient chart and exam requisition(s) for pertinent information.

#### **COGNITIVE ABILITIES**

- Implement critical thinking skills in clinical and lab settings.
- Demonstrate problem-solving skills by recognizing problems, instituting solutions, and assessing outcomes.
- Integrate, analyze, and compare information based on ultrasound images.
- Comprehend multidimensional and spatial relationships of anatomy.
- Perform quantitative and qualitative analysis when problem solving.

## **BEHAVIOR**

- Be organized and perform protocols in a specific sequence.
- Learn by a variety of methods including classroom, lab, groups, individual, and computer activities.
- Display professional behaviors in all interactions with patients, caregivers, students, healthcare workers, and instructors in the clinical, lab, and college settings.
- Adapt to changing environments.
- Accept constructive feedback from others and implement changes learned from feedback.
- Understand the implication of noncompliance with the legal standards.
- Maintain good judgment to complete responsibilities as required.

## **MOTOR SKILLS**

- Be able to bend or stoop for equipment manipulation repetitively.
- Be able to lift 50 lbs. routinely.
- Stand for long periods of time, up to 80%.
- Push or pull large pieces of equipment up to 500 lbs.
- Have full use of hands, wrists and shoulders for scanning and equipment manipulation.
- Manipulate equipment controls in various increments to create diagnostic images.
- Bend at the waist.
- Reach equipment keyboard, controls, and screen.
- Maintain arm and hand positions for extended periods of time for various scanning protocols.
- Have good hand and eye coordination to correctly examine organs and document images.

I have read and understand the DMS Program Technical Requirements and verify that I meet these standards and I am able to participate fully and safely in the clinical portion of the DMS Program.

In addition, students accepted to the DMS Program must notify the DMS Program Director immediately if there is a change in their ability to meet any required technical standard.

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Student Signature

Student Printed Name

Date

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Physician Signature

Physician Printed Name

License #

Date