

Diagnostic Medical Sonography Technical Standards

ESSENTIAL FUNCTION	TECHNICAL STANDARD	SOME EXAMPLES OF NECESSARY ACTIVITIES
Physical Requirements	Must have use of both hands and dexterity in the fingers; full use of legs and arms	<p>Properly manipulate ultrasound machine and transducer</p> <p>Walk and stand for long periods of time (50-75% of day) as needed to conduct ultrasound exams.</p> <p>Lift up to 50 lbs. unassisted.</p> <p>Transport, move, and/or lift patients from a wheelchair or stretcher to ultrasound table or patient bed, and physically assist patients into proper positions for and during examination.</p> <p>Move, adjust, and manipulate a variety of ultrasound equipment weighing up to 100 lbs. (on wheels) portably to other areas of a facility (ICU, ER) to perform exams on immobile patients according to established standards.</p>
Data Conception	Must have the ability to gather, classify, and interpret information regarding patients. Must be able to carry out appropriate actions in relation to the data received.	Interpretation of data given in the medical history and coordination of patient treatment with regards to the data.
Color Discrimination	Must be able to differentiate various shades of grey and colors on the video display.	Recognize changes within the circulatory system from normal to abnormal with regards to color flow patterns displayed on the screen.
Manual Dexterity/ Fine Motor Coordination	Must have excellent eye-hand coordination and manual dexterity; Possess sufficient strength, finger dexterity and flexion to perform finite motor skills.	<p>Effectively maneuver transducer across body while looking at the video display.</p> <p>Exert correct pressure over long periods of time with the transducer over various body parts on different body types.</p> <p>Manipulate the machine quickly and efficiently to acquire diagnostically accurate and relevant images in accordance with established protocols.</p>
Gross Motor Coordination	Must possess excellent Multi-limb coordination, arm-hand steadiness and overall body control precision	Reach at or above shoulder level intermittently for 90% of work time and maintain prolonged arm positions necessary for steady scanning.

Diagnostic Medical Sonography Technical Standards

		<p>Long periods of sitting and standing to scan patient's body while manipulating the machine.</p> <p>Quickly and repeatedly adjust controls of the machine, equipment or patient position as needed for optimization of exam images and patient condition.</p>
Communication	Must effectively comprehend and communicate through verbal and written means.	Communicate both verbally and non-verbally in an effective manner with staff, patients and physicians, in order to explain procedures, give instructions and obtain information.
Reasoning Development	Must be able to apply principles of inductive and deductive reasoning	<p>Use logic and reasoning to identify pathology vs. artifacts on the ultrasound display.</p> <p>Conceptualize the patient's body organs shown on the 2D screen in a 3D format.</p> <p>Use logic and reasoning to identify optimal image and scanning limitations within reasonable amount of time.</p>
Visual Acuity	Must possess the ability to see details at close range; discriminate between blacks, grays, and whites, and various color combinations.	<p>Visualize slight differences in tissue texture representing abnormal pathology seen on the video display.</p> <p>Work in a semi-darkened room for prolonged periods of time.</p>
Language Development	Ability to speak clearly so others can understand	Hear, understand and then react quickly to verbal instructions and patient needs, including but not limited to hearing codes, alarms and patient calls.
Conceptual and Intellectual Development	Must possess the ability to measure, calculate, reason, analyze and synthesize sonographic information during image acquisition. Ability to acquire each image effectively in all clinical settings within the required time frames while in compliance with Sonographic ALARA principles.	<p>Use critical thinking abilities to complete protocol images of sonographic exams within desired clinical time frame.</p> <p>Avoid unnecessary patient ultrasound exposure while optimizing diagnostic quality of images.</p>

Diagnostic Medical Sonography Technical Standards

I acknowledge that I have read the technical standards and essential functions for the DMS Program provided by Horry-Georgetown Technical College. It is my responsibility to contact the Office of Disability Services immediately upon submission of program application at (843) 349-5249, if I am unable to demonstrate any of the technical standards. I acknowledge that demonstrating proficiency in these technical standards is essential to success in clinical/affiliate sites and that I must independently demonstrate proficiency in clinical/affiliate sites in order to complete my certificate, diploma, or degree.

Applicant signature