## **HAGERSTOWN COMMUNITY COLLEGE**

## **MEDICAL IMAGING PROGRAMS**

(Radiography, Computed Tomography, Magnetic Resonance Imaging, Mammography)

## **Technical Standards**

Students enrolled in the medical imaging programs must meet the following requirements to perform effectively in the educational activities of the program and in the medical imaging profession.

Determination is made on an individual basis as to whether or not accommodations or modifications can be reasonably made.

Students who have special needs are encouraged to identify themselves to the Coordinator of Special Student Needs as early as possible. Reasonable accommodations based on current documentation are provided to qualified students.

ISSUE	STANDARD	EXAMPLES OF REQUIRED ACTIVITIES (Not all inclusive)
Critical Thinking	Critical thinking abilities sufficient for safe and appropriate clinical judgment and situation awareness.	<ul> <li>Identify and manage cause-effect relationships in clinical situations.</li> <li>Evaluate radiographs to ascertain proper identification and diagnostic quality.</li> <li>Select and use exposure factors, accessory devices and equipment appropriate for the patient, procedure and situation.</li> <li>Assess patient's condition and needs from a minimum distance of 20 feet.</li> <li>Initiate proper emergency care protocols, including CPR, based on assessment data.</li> </ul>
Interpersonal Behavioral and Social Skills	Interpersonal abilities to interact effectively with patients, families, and the healthcare team from diverse cultural, social, emotional and intellectual backgrounds.	<ul> <li>Establish rapport with patients, families and colleagues.</li> <li>Maintain mature, sensitive, and effective relationships with patients and fellow workers (interpersonal skills).</li> <li>Tolerate physically demanding workload.</li> <li>Function effectively under stress.</li> <li>Adaptability to changing environments (flexible schedules, emergency</li> </ul>

		situations).  • Display compassion, professionalism, empathy, integrity, concern for others, and interest and motivation.
Communication	Communication abilities to perform required written and verbal functions in the program and the health care environment.	<ul> <li>Effectively use communication to gather patient history, instruct the patient, relieve patient anxiety, gain patient cooperation, accomplish the procedure and manage emergency situations.</li> <li>Correctly read the patient's medical chart and/or physician's orders and procedure requisition.</li> <li>Obtain pertinent patient history and legibly write patient history on requisition.</li> <li>Document own actions and patient responses as indicated.</li> <li>Be able to verbally communicate by phone.</li> </ul>
Mobility	Physical and motor abilities sufficient to safely move the patient and equipment.	<ul> <li>Assist all patients, according to individual needs and abilities, in moving, turning, transferring from transportation devices to the x-ray table, etc.</li> <li>Be able to push, pull and lift 50 pounds.</li> <li>Push a stretcher and/or wheelchair without injury to self, patient, or others.</li> <li>Push a mobile x-ray machine from one location to another, including turning corners, getting on and off an elevator, and manipulating it in a patient's room.</li> </ul>
Motor Skills	Gross and fine motor abilities sufficient to provide safe and effective care.	<ul> <li>Manually move the x-ray tube and position the tube at various angles at heights up to 6 feet.</li> <li>Correctly perform medical aseptic procedures such as filling a syringe, sterile tray setup, and surgical garb.</li> <li>Administer emergency care including CPR.</li> <li>Stand for period of time as long as 3 hours wearing lead apron and walking a distance of 5 miles during a normal work day.</li> </ul>
Hearing	Auditory abilities sufficient to monitor and assess patient needs, and provide a safe environment.	Hear patients and staff talk in a normal tone from a distance of 20 feet.      Hear monitor alarms, emergency signals

Visual	Visual abilities sufficient for observation and assessment for safe operation of equipment and patient care management.	<ul> <li>and cries for help.</li> <li>Hear an individual speaking through a phone receiver and respond appropriately.</li> <li>Visualize x-ray collimator centering light and identify its center.</li> <li>Observe the patient to assess patient's condition and/or needs from a distance of 20 feet.</li> <li>Can differentiate various shades of gray as depicted on a radiographic image.</li> <li>Can see numbers, letters, calibrations, etc. of varying sizes located on patient care and imaging equipment.</li> </ul>
Tactile	Tactile ability sufficient to perform patient assessment and equipment operation functions.	<ul> <li>Perform palpation, tactile assessment, and manipulation of the body as required to produce diagnostic images.</li> <li>Manipulate dials, buttons, and switches of various sizes.</li> </ul>
Mental	Intellectual and emotional abilities sufficient for patient assessment, safe operation of equipment, performance of duties and care of patients.	<ul> <li>Be able to mentally concentrate and focus attention, thoughts and efforts on patients and equipment to competently perform patient care and imaging procedures.</li> <li>Be able to respond effectively to patient and imaging conditions and situations.</li> </ul>
Environmental Requirements	Physical and mental health sufficient enough to tolerate the rigors of the program and the health care environment.	Be able to tolerate risks and discomforts in the clinical setting that require special safety precautions, additional safety education and health risk monitoring (i.e. ionizing radiation, darkroom chemicals), working with sharps, chemicals, and infectious disease.  Be able to wear protective clothing, or gear such as masks, goggles, gloves and lead aprons.

Resource: St. Petersburg College Radiography Program

Applicants with allergies and sensitivities, especially to latex and nitrile products, put themselves at risk of reaction in the health care environment. Students with allergies and sensitivities must have permission from their physician and follow physician and college guidelines to participate in the medical imaging programs.

Please list allergies and sensitivities:				
• •		ccupational exposure or medical procedures,		
such as pacemakers or orthoprocedures.	pedic devices, must have pern	nission from their physician to participate in MRI		
Please list and describe any r	netal objects/devices.			
	Program Coordinator if there is enrolled in the Radiography Pro	any change in his/her ability to meet the above ogram.		
l,(print name)	, have read and understand	the requirements listed on this form.		
(signature)	(date)			

10.13.09