

ALL Imaging Sciences Program

Technical Performance Standards

Radiography, as well as other modalities, is a practice discipline with cognitive, sensory, affective, and psychomotor performance requirements. Based on those requirements, a list of “Performance Standards” has been developed. Each standard has an example of an activity or activities that a potential student will be required to perform while enrolled in any imaging sciences program.

| Issue | Standard | Examples of Required Activities (Not all inclusive) |
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| Visual | Visual ability sufficient for observation and assessment necessary in the operation of equipment and care of patients. | <ul style="list-style-type: none">• Visualize x-ray collimator centering light and identify its center.• Observe the patient in order to assess the patient’s condition and/or needs from a distance of at least 20 feet.• Can see numbers, letters, calibrations, etc., of varying sizes located on equipment utilized by a radiographer. |
| Hearing | Auditory abilities sufficient to monitor and assess patient needs, and to provide a safe environment. | <ul style="list-style-type: none">• Hear a patient talk in a normal tone from a distance of 20 feet.• Hear monitor alarm, emergency signals, and cries for help. |
| Tactile | Tactile ability sufficient for patient assessment and operation of equipment. | <ul style="list-style-type: none">• Perform palpation, tactile assessment, and manipulation of body parts to insure proper body placement and alignment.• Manipulate dials, buttons, and switches of various sizes. |
| Mental | Mental ability sufficient for patient assessment and operation of equipment and care of patients. | <ul style="list-style-type: none">• Be able to visually concentrate and focus attention, thoughts, and efforts on patients and equipment for varying periods of time.• Be able to respond to patients’ changing physical conditions. |
| Environmental Requirements | Physical health sufficient enough to be able to tolerate certain conditions present in the clinical setting. | <ul style="list-style-type: none">• Be able to tolerate risks or discomforts in the clinical setting that require special safety precautions, additional safety education, and health risk monitoring (i.e., ionizing radiation), working with sharps, chemicals, and infectious disease. Students may be required to use protective clothing or gear such as masks, goggles, gloves, and lead aprons. |

| Issue | Standard | Examples of Required Activities (Not all inclusive) |
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| Communication | Communication abilities sufficient for interaction with others in verbal and written form. | <ul style="list-style-type: none"> Effectively communicate to the patient in order to converse, instruct the patient, relieve anxiety, gain their cooperation during procedures, understand the patient when they are communicating symptoms of a medical emergency. Read the patient's medical chart and/or physician's orders. Legibly write patient history. Document own actions and patient responses as indicated. |
| Mobility | Physical abilities sufficient to move from room to room and maneuver in small spaces. | <ul style="list-style-type: none"> Assist all patients, according to individual needs and abilities, in moving, turning, transferring from transportation devices to x-ray table, etc. Be able to push, pull, and lift 50 lbs. Push a stretcher and/or wheelchair without injury to self, patient, or others. 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 over carpeting. |
| Motor Skills | Gross and fine motor abilities sufficient to provide safe effective patient care. | <ul style="list-style-type: none"> Manually move the x-ray tube and position the tube at various angles and heights up to 7 feet. Accurately draw up sterile contrast media and other solutions without contaminating the syringe and/or needles, etc. Physically be able to administer emergency care including performing CPR. Place cassettes (image receptors) in Bucky trays and properly manipulate all locks. Be able to stand for periods as long as 2 hours wearing lead aprons and to walk a distance of 5 miles during a normal work day. |

| Issue | Standard | Examples of Required Activities (Not all inclusive) |
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| Critical Thinking | Critical thinking ability sufficient for safe, clinical judgment. | <ul style="list-style-type: none"> Identify cause-effect relationships in clinical situations. Evaluate radiographs to ascertain that they contain proper identification and are of diagnostic value. Select exposure factors and accessory devices for all radiographic procedures with consideration of patient size, age, and extent of disease. Assess patient's condition and needs from a distance of at least 20 feet. Initiate proper emergency care protocols, including CPR, based on assessment data. |
| Interpersonal Behavioral and Social Skills | Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds. | <ul style="list-style-type: none"> Establish rapport with patients, families, and colleagues. Allow mature, sensitive, and effective relationships with patients and fellow workers (interpersonal skills). Tolerate physically taxing workload. Function effectively under stress. Adapt to changing environments (flexible schedules, emergency conditions). Display compassion, professionalism, empathy, integrity, concern for others, and interest and motivation. |

Adapted from: St. Petersburg College Radiography Program with permission.