

## Medical Imaging and Radiation Sciences

### Technical Standards

The medical imaging and radiation sciences professions perform complex procedures that require independent judgment, initiative, and certain physical abilities. The skills and abilities outlined reflect the daily technical standards for medical imaging and radiation sciences practitioners that the clinics require of employees, and students likewise, within the clinic setting. The guidelines are to assist applicants and students in understanding the physical requirements of the health care training and practice environment. Inability to perform each of these functions may impact a student's ability to complete clinical rotations, obtain employment upon graduation, or may compromise the student's ability to provide safe, quality patient care. The Department of Medical Imaging and Radiation Sciences will consider for admission any applicant who has: 1) the ability to perform the technical standards and skills specified, with or without reasonable accommodations, and; 2) met the published criteria for admission required for all applicants. The Department is committed to the principle of diversity. In that spirit, admission to the Department is open to qualified individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 , as amended, and the Americans with Disabilities Act of 1990, as amended.

**Clinical Thinking: Patient needs/problems solving/critical thinking abilities sufficient for clinical judgment.**

- Examples:**
- Interpret physician orders
  - Assess the patient well being
  - Select appropriate equipment and accessories
  - Evaluate and critique images for technical accuracy and procedural determinations
  - Prepare images for interpretation
  - Identify cause-effect relationships in clinical situations
  - Handle stressful situations related to technology, procedures, or patient care
  - Provide emotional support to patients during procedures or treatment
  - Respond effectively and quickly to situations requiring first aid or emergency care of patients
  - Complete necessary documentation

**Interpersonal: Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, economic, emotional, cultural, and intellectual backgrounds.**

- Examples:**
- Establish rapport with patients and colleagues and other health care providers
  - Greet patients and others professionally
  - Work with others as a team to ensure quality patient care
  - Deliver care and services to patients unrestricted by personal concerns of nature of illness, race, color, national origin, sex, sexual orientation, genetic information, age (40 or older), religion, disability, political beliefs, or status as a veteran.

**Communication: Communication proficiency at a professional level in English, both verbal and written, to include reading, writing, spelling, speaking, and listening.**

- Examples:**
- Clearly explain and give patient directions during imaging and/or treatment procedures
  - Initiate patient education
  - Use verbal and non-verbal cues to identify patient needs/problems
  - Document and interpret patient responses clearly, correctly, and without spelling errors
  - Communicate in a professional manner with various health care professionals
  - Display sensitivity to patients or others with hearing, verbal or other communication impairments
  - Possess reading comprehension sufficient to understand patient documentation in the patient chart
  - Possess reading comprehension sufficient to follow instructional signage within the hospital or clinical facility
  - Possess ability to communicate clear instructions to patients and colleagues in emergency situations
  - Possess ability to communicate understandable directions to patients and others within the hospital or clinical facility

- Possess written and verbal communication skills sufficient to be understood by other health care professionals
- Possess listening skills sufficient to understand patients and others when they speak

**Mobility:**

**Physical abilities sufficient to provide safe and effective patient care.**

**Examples:**

- Move independently throughout the department and clinical facility.
- Transport mobile and immobile patients via wheel chair, stretcher, and/or patient bed to and from the department and throughout the clinical facility
- Push and pull imaging equipment, ancillary patient equipment and other objects for a minimum 50 feet up to 100 lbs of force
- Lift and carry from floor level, up to 50 lbs without assistance
- Lift and carry from waist level, above shoulders, and out from the body, up to 25 lbs without assistance
- Assist with moving patients weighing up to 450 lbs with assistance from department personnel and/or mechanical lift devices
- Sit, walk, and/or stand for a minimum of 8 hours
- Assist patients with ambulating throughout the department and clinical facility
- Run, climb, bend, crouch, squat, crawl, kneel, stoop, bend at waist, twist at waist, and balance occasionally for 3-6 hours a day
- Wear radiation protection weighing between 7-20 lbs for extended periods
- Ascend and descend stairways in emergency situations
- Provide life support services including chest compression and ventilation
- Perform patient positioning
- Have sufficient mobility to maintain a safe environment for patients and others

**Motor Skills:**

**Gross and fine motor abilities sufficient to provide safe and effective patient care.**

**Examples:**

- Possess manual dexterity sufficient to execute small hand movements
  - grasp, turn, manipulate equipment controls and/or small objects with and without gloves
  - insert needles and catheters for patient care with gloves
- Possess touch sensation sufficient to detect heat and cold, perform physical assessments of patients
- Possess finger dexterity for keyboard use and typing

**Visual:**

**Visual ability sufficient for observation, assessment, and provision of patient care.**

**Examples:**

- Verify patient identifiers such as armbands
- Read patient charting information in paper or electronic format
- Read displays on medical equipment
- Read signage at a relevant distance
- Recognize and identify clinical information and systems at relevant distance
- Recognize color coding when used for identifying types of information, categories of equipment, and conveying information on displays
- Evaluate gray scale and color scale when used on displays
- Visualize and identify small objects such as needles and other patient care items

**Hearing:**

**Auditory ability sufficient to monitor and assess health needs to communicate with individuals, families, groups, communities, and health care professionals.**

**Examples:**

- Understand speech at normal or low volumes
- Recognize a call for help from a distance equivalent to that of a normal hearing range
- Recognize equipment auditory signals, unusual sounds, and alarms
- Respond to verbal communications and commands given through a mask over the face, in a darkened room, and when speaker has his or her back turned

- Perceive the nature of machinery sounds
- Distinguish sounds such as a patient breathing, wheezing, or gasping
- Use a stethoscope for the evaluation of patient blood pressure

**Other:**                    **Mental alertness sufficient to provide safe, effective patient care.**

**Examples:**    • Work in a latex-burdened environment

A matriculant or current student who discloses a disability and requests accommodation must provide appropriate documentation to substantiate the disability and any functional limitations related to the disability that require reasonable accommodation. The Department, in accordance with University policy, will provide reasonable accommodation to otherwise qualified individuals with disabilities, but is not required to make modifications that would result in a fundamental alteration to the nature of the program, service, or activity, cause undue hardship, or result in undue financial or administrative burdens. In order to matriculate or continue in the curriculum, a matriculant or current student must be able to meet all technical standards that are fundamental to the nature of the program. An inability to successfully meet these technical standards will lead to a withdrawal of an admission offer or dismissal. Requests for accommodation by matriculants or current students should be initiated with the Director of the Disability Resource Center at:

The University of Oklahoma  
Disability Resource Center  
620 Elm Avenue, Suite 166  
Norman, OK 73019-2093  
(405) 325-3852 Voice  
(405) 325-4173 TDD  
[www.ou.edu/drc](http://www.ou.edu/drc)  
[drc@ou.edu](mailto:drc@ou.edu)