

Technical Standards for the Radiography Program

The abilities and skills which students must possess in order to complete the training associated with the Northern Virginia Community College (NOVA) Health Sciences and Nursing Programs are referred to as Technical Standards. These Technical Standards are a group of minimal physical and cognitive abilities as well as sufficient mental and emotional stability to confirm that students are able to complete the entire course of study, participate fully in all aspects of training, and be deployable as competent Health Sciences and Nursing students, with or without reasonable accommodation.

The NOVA Health Sciences & Nursing programs have the ethical responsibility for the safety of patients with whom students will come in contact, and to the public to assure that its students can become fully competent Health Sciences & Nursing professionals. Thus, it is important that persons admitted to our programs possess the intelligence, integrity, compassion, humanitarian concern, and physical and emotional capacity necessary to practice Health Sciences & Nursing skills. Students must verify that they meet these Technical Standards at the time of matriculation to our programs and maintain them during their training. Students are obligated to alert the Program Director of their Health Sciences & Nursing program of any change in their ability to fulfill the technical standards. Students who do not meet the Technical Standards are at risk for dismissal from the program.

The Radiography Program at Northern Virginia Community College adopts its Standards from the Standards approved by the American Society of Radiologic Technologists. These Technical Standards are reviewed annually by the NOVA Radiography Program Advisory Board.

Technical Standard 1: Observation

 Students must be able to observe demonstrations and participate in physical examination sessions, clinical skills workshops, and observe the difference between normal versus pathological states.

Technical Standard 2: Hearing

- Students must have a normal or corrected ability sufficient to interpret verbal communication from patients and the health care team members, and to monitor and assess patient health needs.
- Students must have the ability to hear and respond to monitored alarms, emergency signals, and cries for help.
- Students must have the ability to hear telephone interactions.
- Students must have the ability to hear audible stethoscope signals during blood pressure screenings.
- Students must have the ability to hear patients speaking from a 20-foot distance.

Technical Standard 3: Visual

- Students must have normal or corrected visual acuity sufficient for observation and patient assessment, equipment operations, and departmental protocols.
- Students must have the visual acuity to read, write, and assess the patient and the environment.
- Students must have the ability to read emergency monitor data.
- Students must be able to observe patient conditions and needs from a distance of 20 feet.
- Students must be able to identify and distinguish between colors.
- Students must be able to read radiation exposure readings on x-ray equipment.
- Students must be able to view radiographic images and medical reports.
- Students must be able to read departmental protocols for imaging procedures, radiographic examinations, and physician orders.
- Students must be able to correctly direct the central ray to the anatomical part being imaged and align the image receptor.

Technical Standard 4: Communication

- Students must be able to communicate effectively and sensitively with patients, their families, and members of the health team. Students must be able to communicate effectively with patients from different social and cultural backgrounds, as well as develop an effective professional rapport with patients and co-workers.
- Students must be able to record examination and diagnostic results clearly, accurately, and efficiently.
- Students must be able to communicate effectively in English with patients, family, and other healthcare professionals in a variety of patient settings.
- Students must have adequate verbal, non-verbal, and written communication skills to exchange ideas, detailed information, and instructions accurately.
- Students must have the ability to read, comprehend, and write legibly in the English language.
- Students must have sufficient hearing to assess a patient's needs, follow instructions, communicate with other healthcare workers, and perceive, interpret, and respond to various equipment signals.

Technical Standard 5: Motor Function

- Students must possess the capacity to perform physical examinations and diagnostic maneuvers. They must be able to respond to emergency situations promptly and provide general and emergency care. They must possess adequate sensory function and motor coordination to fulfill minimum competency objectives for inspection, palpation, percussion, and auscultation necessary to perform a physical examination. They must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination in order to utilize standard medical / surgical instruments to participate in the inpatient and outpatient setting and other clinical activities.
- Students must be able to raise objects from a low to high position.
- Students must be able to push, pull, or transfer heavy objects weighing between 25 and 50 lbs.
- Students must be able to walk rapidly for a prolonged period of time while carrying up to 25 lbs.
- Students must have the physical stamina to stand and walk for 8 hours or more in a clinical setting.
- Students must have the ability to stand on both legs, move from room to room, and maneuver in small spaces.
- Students must be able to work with arms fully extended overhead.
- Students must be able to bend downward and forward by bending at the spine or waist.
- Students must have the manual dexterity, mobility, and strength to perform CPR.
- Students must be able to seize, hold, grasp, and turn with their hands.
- Students must be able to complete finite tasks with their fingers.

Technical Standard 6: Intellectual-Conceptual, Integrative, and Quantitative Abilities

- Students must be able to learn through a variety of modalities including, but not limited to, classroom instruction, small group, collaborative team activities, individual study, preparation and presentation of reports, and use computer technology. Students must have the mental capacity to assimilate and learn a large amount of complex, technical, and detailed information in order to formulate diagnostic and therapeutic plans.
- Students must have the ability to deal with abstract and concrete variable issues, define problems, collect data, establish facts, and draw valid conclusions.
- Students must have the ability to interpret instructions furnished in oral, written, or schedule form.

Technical Standard 7: Behavioral and Social Attributes

- Students must have the emotional stability to function effectively under stress and to adapt to an environment that may change rapidly, without warning, and/or in unpredictable ways.
- Students must accept responsibility for learning, exercising good judgment, and promptly completing all responsibilities attendant to the diagnosis and care of patients.
- Students must be able to work effectively, respectfully, and professionally as part of the healthcare team, and to interact with patients, their families, and healthcare personnel in a courteous, professional, and respectful manner.
- Students must be able to contribute to collaborative, constructive learning environments; accept constructive feedback from others, and take personal responsibility for making appropriate positive changes.
- Students must be able to interact purposefully and effectively with individuals and or groups from a range of social, cultural, emotional, and intellectual backgrounds.
 Students must be able to function safely and effectively during high-stress environments.
- Students must be able to maintain a work pace appropriate to a given workload.

Technical Standard 8: Ethical and Legal Standards

• Students must be able to understand the basis and content of both general and medical ethics. The student must possess attributes that include compassion, empathy, altruism, integrity, responsibility, and tolerance. Students must be able to recognize limitations in their knowledge, skills, and abilities and to seek appropriate assistance with their identified limitations. Students whose performance is impaired by abuse of alcohol or other substances are not suitable candidates for admission, promotion, or graduation. In addition, should the student be convicted of any felony offense while in the Allied Health & Nursing Programs, they agree to immediately notify the program as to the nature of the conviction. Failure to disclose prior or new offenses can lead to disciplinary action that may include dismissal.

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Technical Standard 9: Critical Thinking

- Students must have critical thinking ability sufficient for clinical judgment;
 synthesize information from written material and apply knowledge to clinical situations.
- Students must be able to respond to emergencies promptly and provide general and emergency care.
- Students must be able to make rapid decisions under pressure.
- Students must be able to handle multiple priorities in stressful situations.
- Students must be able to identify cause-effect relationships in clinical situations.
- Students must be able to develop an order of multiple imaging exams.

Technical Standard 10: Environmental

- Students must have the ability to tolerate environmental stressors.
- Students must be able to tolerate risk or discomfort in clinical settings that require special safety precautions, additional safety education, and health risk monitoring, working with sharps, chemicals, and infectious diseases.
- Students may be required to wear protective clothing or gear such as masks, goggles, gloves, and lead aprons.
- Students must be able to work with chemicals and detergents.
- Students must be able to tolerate exposure to fumes and odors.
- Students must be able to work in areas that may be close and crowded.

By signing this document, I attest that I meet all of the required <u>Radiography Technical Standards</u>. I accept my responsibility to immediately notify the Radiography Program Director of any change in my ability to meet the Technical Standards during the program.

Signature of Radiography Student	Date	
Printed Name of Radiography Student		