

Technical Standards

Surgical Technology

In this program, students should be able to meet specific technical standards, which are the essential skills and abilities needed to be successful in a program, with or without reasonable accommodation. It is important to review and understand these standards before applying to the program. All Technical Standards documents are available for review on the Northwood Tech website at: <https://www.northwoodtech.edu/technical-standards>

This document should be reviewed prior to applying to the program.

Reasonable accommodations for persons with disabilities will be made to ensure access to academic programs, activities, services, and employment in accordance with Section 504 and 508 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, as amended. If accommodations are needed, contact the campus Accommodations Specialist or the Northwood Tech Affirmative Action/Equal Opportunity Officer, at 715-645-7042, TTY 711, 30 days in advance of needed assistance. Services available are documented on the Northwood Tech Accommodations webpage:

[Accommodation Services | Northwood Technical College.](#)

For more information, please see Administrative Procedure J-111A Reasonable Accommodation for Student.

AREA	STANDARD	EXAMPLES (NOT INCLUSIVE)
Physical Skills	<p>The student must demonstrate:</p> <ul style="list-style-type: none">• Gross motor for data collection/assessment, intervention, and to promote a safe environment.• Fine motor/dexterity to manipulate small objects and complete procedures or assessments.• Endurance, strength, mobility, balance, flexibility, and coordination to perform client care activities and emergency procedures.	<ul style="list-style-type: none">• Move within confined spaces• Maintain balance in multiple positions• Reach above shoulders (e.g., adjust overhead lights)• Reach below waist (e.g., plug electrical appliance into wall outlet)• Reach out front• Pick up objects• Grasp small objects firm and slight (ex. Surgical instruments, sutures)• Document with pen or pencil• Key/type (e.g., use a computer)• Pinch/pick (e.g., manipulate a syringe)• Twist (e.g., turn objects/knobs)• Squeeze (e.g., eye dropper)• Manual dexterity• Demonstrate dexterity with small objects• Simultaneous use of hands, wrists, fingers• Coordinate eye-hand and eye-hand foot (e.g., pumping soap dispenser and surgical scrub)• Stand for long periods of time from 2-4 hours• Maintain same position for long periods of time• Sustained repetitive movements• Function in a fast-paced work environment for hours• Push and pull 50 pounds (e.g., carry instrument pans, position client, move equipment)• Support 50 pounds of weight (e.g., hold arm or leg)• Lift 50 pounds (e.g., pick up a child, transfer client, bend to lift an infant or child)

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Physical Skills (continued)		<ul style="list-style-type: none"> • Carry equipment/supplies (e.g., lift instrument pans) • Use upper body strength (e.g., retraction, physically restrain a client) • Squeeze (e.g., operate fire extinguishers)
Sensory Skills	<p>The student must demonstrate:</p> <ul style="list-style-type: none"> • Vision sufficient for observation and assessment of patient care. • Tactile, auditory, visual, and olfactory ability for data collection/assessment and to promote a safe care environment. • Ability to tolerate exposure to odors and common allergens. 	<ul style="list-style-type: none"> • Ability to detect normal speaking level sounds (e.g., person to person conversation, request for instrument) • Detect faint voices and body sounds (e.g., heartbeat) • Ability to discriminate speech in presence of background noises • Hear in situations when not able to see lips (e.g., masks are work in the operating room) • See objects up to 20 inches away (e.g., information on monitor screen, identification of small needles) • See objects up to 20 feet away • Use depth perception • Use peripheral vision • Distinguish color and color intensity (e.g., color codes on supplies) • See in darkened room (e.g., during endoscopic procedures, eye surgery) • Feel vibrations (e.g., palpate pulses) • Detect temperature (e.g., solutions) • Feel differences in surface characteristics • Feel differences in sizes, shapes • Detect environment temperature • Tolerate exposure to allergens (e.g., latex gloves, chemical/substances) • Tolerate strong soaps • Tolerate strong odors • Exposure and tolerate unpleasant sights and sounds, electrical energy, solvents, grease, oils, slippery or uneven walking surfaces and excessive noises • Tolerate working in confined spaces for extended periods of time • Tolerate wearing protective equipment (e.g., mask, gown, gloves, glasses, laser, radiation) • Tolerate working indoors • Tolerate working in extreme temperatures
Communication Skills	<p>The student must have the ability to:</p> <ul style="list-style-type: none"> • Communicate effectively with patients/clients, families, peers, supervisors, members of the public, and other healthcare professionals. 	<ul style="list-style-type: none"> • Ability to speak, write, and understand English in order to be able to communicate with clients as well as report and document client information • Comprehend spoken / written word • Collaborate with others (e.g., health care workers, peers) • Comprehend and exhibit non-verbal communication • Read and understand written documents

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<p>Communication Skills (continued)</p>	<ul style="list-style-type: none"> • Observe, recognize, respond to, and use appropriate non-verbal communication. • Listen and respond to others in a nonjudgmental, respectful manner. • Speak, read, comprehend, interpret, and convey information. • Produce written work legibly, accurately, and in a timely manner. • Read and understand digital and computer displays, as well as enter data in a computerized client record. • Cope with strong emotions and adapt to unpredictable situations. 	<ul style="list-style-type: none"> • Read digital displays • Ability to count, add, subtract, multiply and divide whole numbers Compute fractions and decimals • Document numbers in records • Tell and measure time • Read measurement marks (e.g., rulers, scale) • Establish professional relationships • Adapt to changing environment / stress • Deal with the unexpected (e.g., client condition, crisis) • Focus attention on task • Cope with own emotions • Perform multiple responsibilities concurrently • Cope with strong emotions in others (e.g., grief, anger, stress) • Accept constructive feedback • Accept responsibility for own actions
<p>Safety Skills</p>	<p>The student must have the ability to:</p> <ul style="list-style-type: none"> • Apply knowledge, skills, and experience to provide a safe environment for the patient/client, self, and the healthcare team. • Respond appropriately to threatening or emergent situations. • Adhere to safety guidelines and regulations in a variety of healthcare settings. 	<ul style="list-style-type: none"> • Put the patient first • Adjust practices according to patient needs • Recognize hazards and apply safety principles including emergency preparedness • Provide safe patient care in a timely manner • Demonstrate safe practice with sharps (blades, needles, etc) • Demonstrate safe practice with medications and solutions • Demonstrate safe and efficient decontamination and disinfection principles • Handle instruments and supplies according to OSHA guidelines and hospital policy and procedure
<p>Critical Thinking Skills</p>	<p>The student must have the ability to execute the following skills in a timely/immediate manner:</p> <ul style="list-style-type: none"> • Problem solve creatively. • Make decisions based on data and policy. • Analyze, synthesize, and interpret information. • Make safe and appropriate decisions, including when under stressful situations. • Acknowledge limitations of knowledge or performance ability (stay within scope of practice). 	<ul style="list-style-type: none"> • Identify cause-effect relationships • Plan/control activities (organizational skills) • Sequence information • Make decisions independently • Adapt decisions based on new information • Comprehend and follow instructions • Follow a process from start to finish (e.g., 2 or more step instruction) • Transfer knowledge from one situation to another • Process and interpret information from multiple sources (written or oral) • Analyze and interpret abstract and concrete data • Evaluate outcomes • Problem solve • Prioritize tasks (e.g., time management)

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Critical Thinking Skills (continued)	<ul style="list-style-type: none">• Perform basic mathematical skills.	<ul style="list-style-type: none">• Use long-term memory• Use short-term memory
Professionalism	<p>The student must demonstrate:</p> <ul style="list-style-type: none">• Integrity, moral reasoning, ethical behaviors, and concerns for others.• Respect for diverse populations.• Ability to adapt to changing environments.• Ability to function effectively under stress.• Confidentiality when working with diverse individuals and communities.• Ability to accept constructive feedback and responsibility for own actions.	<ul style="list-style-type: none">• Establish rapport with individuals (e.g., surgeons, staff members) and groups• Respect / value diversity in others• Negotiate interpersonal conflict• Demonstrate tolerance in working with others Function as part of a team• Follow AST Code of Ethics• Follow HIPAA guidelines

Northwood Technical College does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to manage inquiries regarding the non-discrimination policies: Amanda Gohde, Associate Vice President, Talent & Culture, 1900 College Drive, Rice Lake WI 54868; Amanda.Gohde@NorthwoodTech.edu, phone: 715-645-7042.

This document was adapted from Waukesha County Technical College.