

**Lakeshore Technical College's
Functional Abilities and Technical Standards for
Surgical Technologist Program**

Gross Motor Skills: Move within confined spaces
Maintain balance in multiple positions
Reach above shoulders (e.g., adjust overhead lights and IV poles)
Reach below waist (e.g., plug electrical appliances into wall outlet)
Reach out front

Fine Motor Skills: Pick up objects with hands
Grasp small objects with hands (e.g., surgical instruments, sutures)
Write with pen or pencil
Key/type (e.g., use a computer)
Pinch/pick or otherwise work with fingers (e.g., manipulate a syringe)
Twist (e.g., turn objects/knobs using hands; attach power equipment)
Squeeze with fingers (e.g., bulb syringe, eye dropper)
Manual Dexterity
Finger dexterity
Simultaneous use of hands, wrists, fingers
Coordinate eye-hand and eye-hand foot (e.g., pumping soap dispenser and surgical scrub)

Physical Endurance: Stand for long periods of time from 2-4 plus hours
Maintain same position for long periods of time
Sustain repetitive movements (e.g., CPR)
Maintain physical tolerance (e.g., work on your feet a minimum of 8 hours)
Function in a fast-paced work environment for hours

Physical Strength: Push and pull 50 pounds (e.g., carry instrument pans, position patients, move equipment)
Support 50 pounds (e.g., hold extremity for prep or as needed)
Lift 50 pounds (e.g., pick up child, transfer patient, bend to lift an infant or child)

Carry equipment/supplies (e.g., lift instrument pans)
Use upper body strength (e.g., CPR, retraction, physically
restrain a patient)
Squeeze with hands (e.g., operate a fire extinguisher)

Mobility:

Stand
Walk
Twist, turn
Bend, stoop, squat
Sit
Climb stairs
Move quickly

Hearing:

Ability to hear normal speaking level sounds (e.g., person to
person)
Hear faint voices and body sounds (e.g., heartbeat, assess
placement of tubes)
Ability to discriminate speech in presence of background noises
Hear in situations when not able to see lips (e.g., when masks
are used)
Hear auditory alarms (e.g., monitors, fire alarms)

Visual:

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 intensity (e.g., color codes on supplies,
flushed skin/paleness)
See in darkened room (e.g., during endoscopic procedures, eye
surgery)

Tactile:

Feel vibrations (e.g., palpate pulses)
Detect temperature (e.g. solutions)
Feel differences in surface characteristics (e.g., type of sutures)
Feel differences in sizes, shapes (e.g., identify body landmarks,
palpate vein)
Detect environmental temperature

Smell: Detect odors (e.g., foul smelling drainage, alcohol breath, smoke, gases or noxious smells)

Environment: 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., masks, gown, gloves, glasses, laser, radiation)
Tolerate working indoors
Tolerate working in extreme temperatures

Reading: Read and understand written documents (e.g., preference cards, instructions)
Read digital displays

Math: Count
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)
Calibrate equipment

Emotional Stability: Establish professional relationships
Adapt to changing environment/stress
Deal with the unexpected (e.g., patient conditions, 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
Provide patients with emotional support

Analytical Thinking: 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)
- Use long-term memory
- Use short-term memory

Critical Thinking: 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 instructions)

Interpersonal Skills: 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

Communication Skills: Speak English
Write English
Listen/comprehend spoken/written word
Collaborate with others (e.g., health care workers, peers)
Comprehend and exhibit non-verbal communication
Manage information