

FUNCTIONAL ABILITIES FOR FUNCTIONAL ABILITIES FOR THE ASSOCIATE OF APPLIED SCIENCE DEGREE SURGICAL TECHNOLOGISTS

Functional Ability Categories & Representative Activities/Attributes for the Associate Degree Surgical Technologists Program

The Federal American with Disabilities Act (ADA) bans discrimination of persons with disabilities. In keeping with this law, Gateway Technical College makes every effort to ensure quality education for all students. However, we feel obliged to inform students of the functional abilities demanded by a particular occupation.

Gross Motor Skills:

- Move within confined spaces
- Maintain balance in multiple positions
- Reach above shoulders (e.g., IV poles)
- Reach below waist (e.g., plug electrical appliance 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 finger (e.g., eye dropper)

Physical Endurance:

- Stand (e.g., at operative field for long periods of time during surgical or therapeutic procedure)
- Sustain repetitive movements (e.g., CPR)
- Maintain physical tolerance (e.g., work on your feet a minimum of 8 hours)

Physical Strength:

- Push and pull 50 pounds (e.g., carry instrument pans, position client, move equipment)
- Support 50 pounds of weight (e.g., hold extremity for prep)
- Lift 50 pounds (e.g., pick up a child, transfer client, bend to lift an infant or child)
- Carry equipment/supplies (e.g. lift instrument pans)
- Use upper body strength (e.g., perform CPR, physically restrain a client)
- Squeeze with hands (e.g., operate fire extinguisher)

Mobility:

- Twist
- Bend
- Stoop/squat
Move quickly (e.g., response to an emergency)
- Climb stairs
- Walk

Hearing:

- Hear normal speaking-level sounds (e.g., person-to-person request for instrument)
- Hear faint voices
- Hear faint body sounds (e.g., blood pressure sounds, assess placement of tubes)
- Hear in situations when not able to see lips (e.g., when masks are used)
- Hear auditory alarms (e.g., monitors, fire alarms, call bells)

Visual:

- See objects up to 20 inches away (e.g., information on monitor screen, skin conditions)
- See objects up to 20 feet away (e.g., client in room)
- Use depth perception
- Use peripheral vision
- Distinguish color and color 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., skin, solutions)
- Feel differences in surface characteristics (e.g., types of suture)
- Feel differences in sizes, shapes (e.g., palpate vein, identify body landmarks)
- Detect environmental temperature

Smell:

- Detect odors (e.g., foul smelling drainage, alcohol breath, smoke [cautery and laser], gasses or noxious smells)

Environment:

- Tolerate exposure to allergens (e.g., latex gloves, chemical substances)
- Tolerate strong soaps
- Tolerate strong odors
- Tolerate cool temperatures of the operating room suites

Reading:

- Read and understand written documents (e.g., flow sheets, charts, graphs, procedure cards, instructions on equipment)
- Read digital displays

Math:

- Comprehend and interpret graphic trends (e.g. autoclave charts)
- Calibrate equipment
- Convert numbers to and from metric, apothecaries', and American systems (e.g., dosages)
- Tell time
- Measure time (e.g., count duration of contractions, CPR, etc.)
- Count rates (e.g., drips/minute, pulse)
- Read and interpret measurement marks (e.g., measurement tapes and scales)
- Add, subtract, multiply, and/or divide whole numbers
- Compute fractions and decimals (e.g., medication dosages)
- Document numbers in records (e.g., charts, computerized data bases)

Emotional Stability:

- Establish professional relationships
- Provide client with emotional support
- 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)

Analytical Thinking:

- Transfer knowledge from one situation to another
- Process and interpret information from multiple sources
- Analyze and interpret abstract and concrete data
- Evaluate outcomes
- Problem solve
- Prioritize tasks
- Use long-term memory
- Use short-term memory

Critical Thinking:

- Identify cause-effect relationships
- Plan/control activities for others
- Synthesize knowledge and skills
- Sequence information
- Make decisions independently
- Adapt decisions based on new information

Interpersonal Skills:

- Establish rapport with individuals (surgeons staff members) and groups
- Respect/value cultural differences in others
- Negotiate interpersonal conflict

Communication Skills:

- Teach (e.g., peers, co-workers, students)
- Influence people
- Speak English
- Write English
- Listen/comprehend spoken/written word
- Collaborate with others (e.g., health care workers, peers)
- Manage information