

# **FUNCTIONAL ABILITIES FOR THE ASSOCIATE OF APPLIED SCIENCE DEGREE FIREMEDIC AND TECHNICAL DIPLOMA FIREFIGHTER TECHNICIAN**

---

## **Functional Ability Categories and Representative Activities/Attributes for the Associate of Applied Science Degree FireMedic and Technical Diploma Firefighter Technician**

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 obligated to inform students of the functional abilities demanded by a particular occupation.

Students should have the ability to:

### **GROSS MOTOR SKILLS:**

- Move quickly and accurately and coordinate hand eye movements
- Maintain balance in multiple positions
- Move hands easily and skillfully
- Occasional pushing or pulling
- Move within restricted spaces
- Reach above shoulders, reach below waist, and reach out front

### **FINE MOTOR SKILLS:**

- Pick up, grasp and manipulate small objects (IV Tubing, pencil) rapidly and quickly with hands
- Pinch, squeeze, pick up, or otherwise work with fingers (e.g., manipulate a syringe, eye dropper)
- Squeeze with hands (operate fire extinguisher)
- Simultaneous hand wrist finger movement, twist/turn objects with hands (e.g., doorknobs)
- Key/type (e.g., use a computer)
- Good eye, hand, and foot coordination

### **PHYSICAL ENDURANCE:**

- Tolerate lengthy periods of standing and/or walking
- Sustain repetitive movements (e.g., CPR)
- Able to adapt to a variety of weather conditions
- Tolerate frequent lifting and carrying

### **PHYSICAL STRENGTH:**

- Heavy Lifting (exerting in excess of 100lbs of force occasionally or in excess of 50lbs of force frequently, or in excess of 20lbs of force constantly to move objects)
- Lift and carry equipment/supplies (in excess of 50lbs)
- Lift, carry, support, and balance up to 125lbs (250lbs with assistance)
- Use upper body strength (e.g., performs CPR, operate patient transfer devices)

### **MOBILITY:**

- Walk, climb, and/or balance (e.g., climb stairs)
- Stoop, kneel, crouch, squat, reach, crawl, twist, or bend

## MOBILITY (continued):

Move quickly (e.g., respond to an emergency)

## HEARING:

Hear and discriminate speech at normal conversation sound levels (e.g., person-to-person)

Hear faint voices and/or body sounds (e.g., blood pressures, assess tube placements)

Hear in situations when not able to see lips move (e.g., when masks are utilized)

Hear auditory alarms (e.g., monitors, emergency alarms)

Hear and discriminate speech situation with extraneous noise (e.g., back of ambulance, emergency scenes)

Hear and discriminate sounds in situations with extraneous noise (e.g., lung sounds, heart tones, blood pressure)

## VISUAL:

See objects up to 20 inches away (e.g., information on computer screen, skin conditions, small needles)

See objects up to 60 feet away (e.g., clients or hazards on scenes)

Use of depth and peripheral visions

Distinguish color and color intensity (e.g., color codes on supplies, paleness or flushed skin)

See in a darkened room

Vision correctable to obtain Wisconsin CDL training permit

## TACTILE:

Feel vibrations (e.g., palpate pulse rate)

Detect hot and cold temperature (e.g., skin, solutions)

Feel differences in sizes and shapes (e.g., palpate vein, identify body landmarks)

Feel differences in surface characteristics (e.g., skin turgor, rashes)

Detect environmental temperature

## SMELL:

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

## ENVIRONMENT:

Work in cold, with or without temperature changes

Work in extreme heat, with or without temperature changes

Work in wet and/or humid conditions

Tolerate and work in noisy environments

Tolerate vibration

Work in hazards (e.g., vehicle extrication, infectious disease, inclement weather, etc.)

Work in atmospheric conditions

Tolerate exposure to allergens (e.g., latex gloves, chemical substances)

Tolerate strong soaps and strong odors

Tolerate healthcare environments containing latex

## READING:

Read and understand written documents (e.g., protocols, patient care records, medications)

Read digital displays

Accurately read a Drug Reference Manual

Accurately read a road map

Read written reports for accuracy

Read professionals journals

## MATH:

- Add, subtract, multiply, and divide numbers
- Calculate fractions, percentages, ratios and proportions, and measurements with quickness and accuracy
- Convert numbers to and from metric, apothecaries', and American systems (e.g., dosages)
- Tell and measure time (e.g., count duration of contractions, CPR, medication administration)
- Count rates (e.g., drip rates, pulse rates, minutes)
- Read and interpret graphic trends, measurement marks (e.g., measurement tapes, scales)
- Calibrate equipment
- Document numbers in records (e.g., charting, computerized databases)

## EMOTIONAL STABILITY:

- Adapt to changing environments/stress
- Deal with unexpected situations (e.g., crisis, client conditions)
- Ability to use good judgment and remain calm in high-stress situations
- Accept responsibility of own actions
- Assume roll of team leader
- Focus attention on task
- Independent and confident
- Accept feedback appropriately
- Establish professional relationships
- Provide emotional support to clients and families
- Cope with own emotions
- Perform multiple responsibilities concurrently
- Cope with strong emotions in others (e.g., grief, delirium)

## ANALYTICAL THINKING:

- Use short term and long term memory
- Problem solve
- Analyze and interpret abstract and concrete data
- Evaluate outcomes
- Strong reasoning skills are required to deal with the complexity and variety of situations encountered
- Transfer knowledge from one situation to another
- Process and interpret written and oral information from multiple sources
- Prioritize tasks (time management)
- Plan and control activities
- Apply math concepts

## CRITICAL THINKING:

- Plan, schedule, and control activities for others
- Synthesize knowledge and skills
- Comprehends and follow instructions/process
- Ability to draw valid conclusions expediently relevant to patient's condition, often using limited I information
- Identify cause-effect relationships
- Sequence information
- Make decisions independently
- Adapt decisions based on re-assessment of situation

## INTERPERSONAL SKILLS:

- Establish a rapport with individuals, staff, students, preceptors
- Respect/value diversity in others
- Resolve interpersonal conflict
- Demonstrate problem solving and conflict resolution skills
- Function as part of a team

## COMMUNICATION SKILLS:

- Able to speak English and write English legibly
- Read English
- Listen attentively and comprehend written and spoken words
- Comprehend and exhibit nonverbal cues
- Effectively communicate with colleagues, clients, families, lay public, medical professionals
- Teach (e.g., colleagues, client/family about health care)
- Influence people
- Direct, manage, and/or delegate activities of others
- Arrange /manage information in an order or pattern
- Collaborate with others