

## **Essential Functions-Technical Standards of the Medical Science Student**

### **Marion Technical College**

The following essential functions (technical standards) describe the cognitive, behavioral, and psychomotor skills required for students to successfully complete a Medical Sciences program at Marion Technical College, including the Medical Laboratory Technology (MLT) program.

These standards are consistent with the expectations of entry-level practice for medical laboratory professionals and are necessary to ensure the safety of students, patients, and healthcare staff.

Applicants and enrolled students should review these standards to develop an understanding of the skills, abilities, and professional behaviors required to progress in and successfully complete the program.

Marion Technical College complies with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act. Qualified students who require accommodations should contact the Office of Disability Services. Reasonable accommodations will be considered on an individual basis; however, accommodations must not compromise essential program requirements or patient safety.

#### Cognitive Requirements (Intellectual/Conceptual)

Students must demonstrate the ability to exercise sound judgment and apply knowledge in both academic and clinical settings. This includes, but is not limited to, the ability to:

- Apply mathematical concepts to laboratory calculations and data analysis
- Define problems, analyze data, and develop appropriate solutions
- Interpret and apply laboratory procedures and protocols
- Exercise critical thinking and clinical reasoning
- Distinguish relevant from irrelevant information and recognize errors or inconsistencies
- Follow written and verbal instructions accurately
- Transfer and apply knowledge to new and unfamiliar situations
- Communicate effectively in written, verbal, and electronic formats with patients, peers, faculty, and healthcare professionals

#### Affective Requirements (Behavioral and Social)

Students must demonstrate professional behaviors consistent with healthcare standards. This includes, but is not limited to, the ability to:

- Maintain accountability for actions and professional responsibilities
- Demonstrate self-direction, initiative, and commitment to learning
- Accept feedback and engage in self-assessment and improvement

- Function effectively under **stress, time constraints, and changing priorities**
- Prioritize tasks and manage multiple responsibilities simultaneously
- Work independently and collaboratively as part of a healthcare team
- Recognize and respond appropriately to emergency situations
- Demonstrate ethical behavior, integrity, and respect for diverse populations
- Maintain professional demeanor, including reliability, punctuality, and appropriate communication

Psychomotor Requirements (Motor and Physical)

Students must be able to perform the physical and technical skills required in laboratory and clinical environments. This includes, but is not limited to, the ability to:

- Meet attendance requirements and actively participate in all laboratory and clinical experiences
- Perform laboratory procedures safely and accurately, including:
  - Venipuncture and capillary puncture
  - Specimen collection, handling, and processing
  - Operation of laboratory instrumentation and equipment
- Accurately observe and interpret data, including:
  - Reading computer screens, instrument outputs, and laboratory reports
  - Distinguishing color, size, shape, and turbidity in specimens and test results
  - Performing macroscopic and microscopic analysis (e.g., body fluids, hematology, microbiology)
- Manipulate equipment and materials, including microscopes, pipettes, analyzers, and computer systems
- Maintain dexterity and coordination sufficient to perform precise laboratory tasks without causing harm to self or others
- Safely access and function within a variety of clinical environments, including patient rooms, emergency departments, and intensive care units

I have read and understand the Essential Functions (Technical Standards) required for participation in a Medical Sciences program at Marion Technical College. I acknowledge that I must be able to perform these functions **with or without reasonable accommodation**, consistent with the Americans with Disabilities Act.

I understand that inability to meet these standards may impact my ability to safely and successfully complete the program.

Print Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_