## Ozarks Technical Community College Medical Laboratory Technical Program Essential Function Requirements

Faculty in the ML T program are responsible for the welfare of students enrolled in the program, for patients affected or treated by students in the program, and for staff working there. Therefore, admission and retention decisions for the ML T program are based not only on satisfactory academic achievement but also on non-academic factors that ensure that candidates can complete the essential requirements of the academic program for graduation.

Essential requirements, as distinguished from academic standards, refer to those cognitive, physical, and behavioral abilities necessary for satisfactory completion of all aspects of the curriculum. The ML T program has established the following list of minimum essential (non-academic) requirements in compliance with the American Disabilities Act (PL 101-336), and the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) that must be met, with or without reasonable accommodations, to participate in the program and graduate.

If a student's ability to perform essential functions depends on utilization of accommodations, it should be noted that students must request accommodations from the Disability Support Services Department (DSS) and must be accompanied by appropriate medical or psychological/psychiatric documentation to support this request. Contact DSS, located in Information Commons, at 417-447-8189 for further information. All students must possess the following abilities, with or without accommodation:

Essential Function	Technical Standard	Examples of Necessary Activities (not all inclusive)
Vision/Observation Requirements	Vision/Observation requirements include the ability to read charts, graphs, instrument displays, and the printed word, on paper or a computer monitor; distinguish gradients of colors, interpret microscopic and macroscopic details. <b>NOTE:</b> Color blindness does not necessarily preclude admission to the program.	<ol> <li>Read and interpret charts, graphs, and instrument displays, such as analyzing a Complete Blood Count (CBC) graph on an automated hematology analyzer.</li> <li>Identify subtle color gradients, such as distinguishing between shades of pink and purple on a Wright-stained peripheral blood smear.</li> <li>Observe microscopic details, such as identifying abnormal cellular morphology under a microscope.</li> <li>Recognize macroscopic details, such as</li> </ol>

Speech/Hearing/Communication Requirements	Speech/Hearing/Communication requirements include the ability to communicate effectively and sensitively in written and spoken Standard English in a manner that is understandable with instructors, fellow students, patients, and other members of the health care team in person and on the other end of the telephone; write and transmit information clearly, accurately, and efficiently.	<ul> <li>differentiating between hemolyzed and non- hemolyzed blood specimens.</li> <li>5) Work with printed or digital materials, including laboratory manuals, results screens, and computer monitors.</li> <li>1) Communicate with healthcare team members regarding abnormal or critical patient results.</li> <li>2) Write concise and accurate reports, such as documenting quality control data.</li> <li>3) Respond to phone inquiries from clinicians about test results or sample requirements.</li> <li>4) Clearly explain pre- analytical sample handling instructions to other health care staff.</li> <li>5) Listen and respond to instructions during laboratory training coscions or</li> </ul>
Motor Function Requirements	Motor Function requirements include sufficient motor function to perform a variety of routine laboratory testing, move freely and safely from one location to another in the clinical laboratory, patient care areas, corridors, and elevator; sufficient upper body muscle coordination to collect appropriate clinical specimens safely and accurately; dexterity to manipulate tools, instruments, and small equipment, including keyboards or other data input tools in a manner consistent with	<ul> <li>sessions or troubleshooting calls.</li> <li>1) Pipette precise volumes of reagents or samples, such as preparing serial dilutions for a test.</li> <li>2) Collect and handle clinical specimens, such as venipuncture for blood collection.</li> <li>3) Operate laboratory instruments, such as loading specimens into a centrifuge.</li> <li>4) Move freely in laboratory and clinical areas, such as</li> </ul>
	standards of clinical laboratory practice; ability to travel to assigned clinical experience sites;	navigating safely between workstations and patient care areas.

	lift and move objects of at least 20	5) Lift and transport
	pounds.	laboratory supplies, such as carrying a 20-pound container of reagent to the required piece of equipment.
Intellectual, Conceptual, Integrative, and Quantitative Requirements	Intellectual, Conceptual, Integrative, and Quantitative requirements include the ability to read and understand textbooks, professional journals, and instrument manuals; read and follow written and verbal instructions in Standard English; measure, calculate, reason, analyze, evaluate and synthesize laboratory information/data.	<ol> <li>Analyze and interpret quality control data to determine if test results are reliable.</li> <li>Measure and calculate dilutions, such as preparing a 1:10 dilution of a patient sample.</li> <li>Synthesize information from multiple sources, such as combining patient history with lab results to identify potential errors.</li> <li>Follow detailed verbal and written instructions, such as standard operating procedures (SOPs) for tests.</li> </ol>
		<ol> <li>Evaluate and troubleshoot instrument errors, such as recalibrating an analyzer based on error codes.</li> </ol>
Behavioral and Social Requirements	Behavioral and Social requirements include possessing the emotional stability required to be able to exercise good judgment in the lecture, laboratory, and clinical settings; work under time constraints to complete tasks on time in a mature, sensitive, and effective manner; work under both relaxed and stressful emergency situations, prioritize tasks, work on at least two different tasks at one time; make correct judgments with regards to patient results; be flexible with scheduling and able to adapt to changing environments in the laboratory; maintain alertness and concentration during a normal work period; work safely with potential chemical,	<ol> <li>Exercise sound judgment when prioritizing tasks during a busy work shift, such as balancing STAT orders with routine testing.</li> <li>Work effectively under time constraints, such as completing multiple assays within a limited timeframe.</li> <li>Adapt to changing environments, such as switching between manual and automated testing protocols.</li> <li>Follow safety protocols, such as wearing personal protective equipment</li> </ol>

radiological, and biological hazards	(PPE) when handling
using Universal Precautions; meet	infectious samples.
attendance requirements; possess	5) Maintain a professional
the physical and psychological	demeanor with nurses and
health requirements for full	coworkers, even in high-
utilization of abilities; apply	stress or emergency
knowledge, skills, and values	situations such a mass
learned from coursework and life	transfusion protocol in
experience to new situations.	blood bank.
	6) Meet attendance and
	punctuality requirements
	to ensure continuity of
	patient care and
	laboratory workflow.