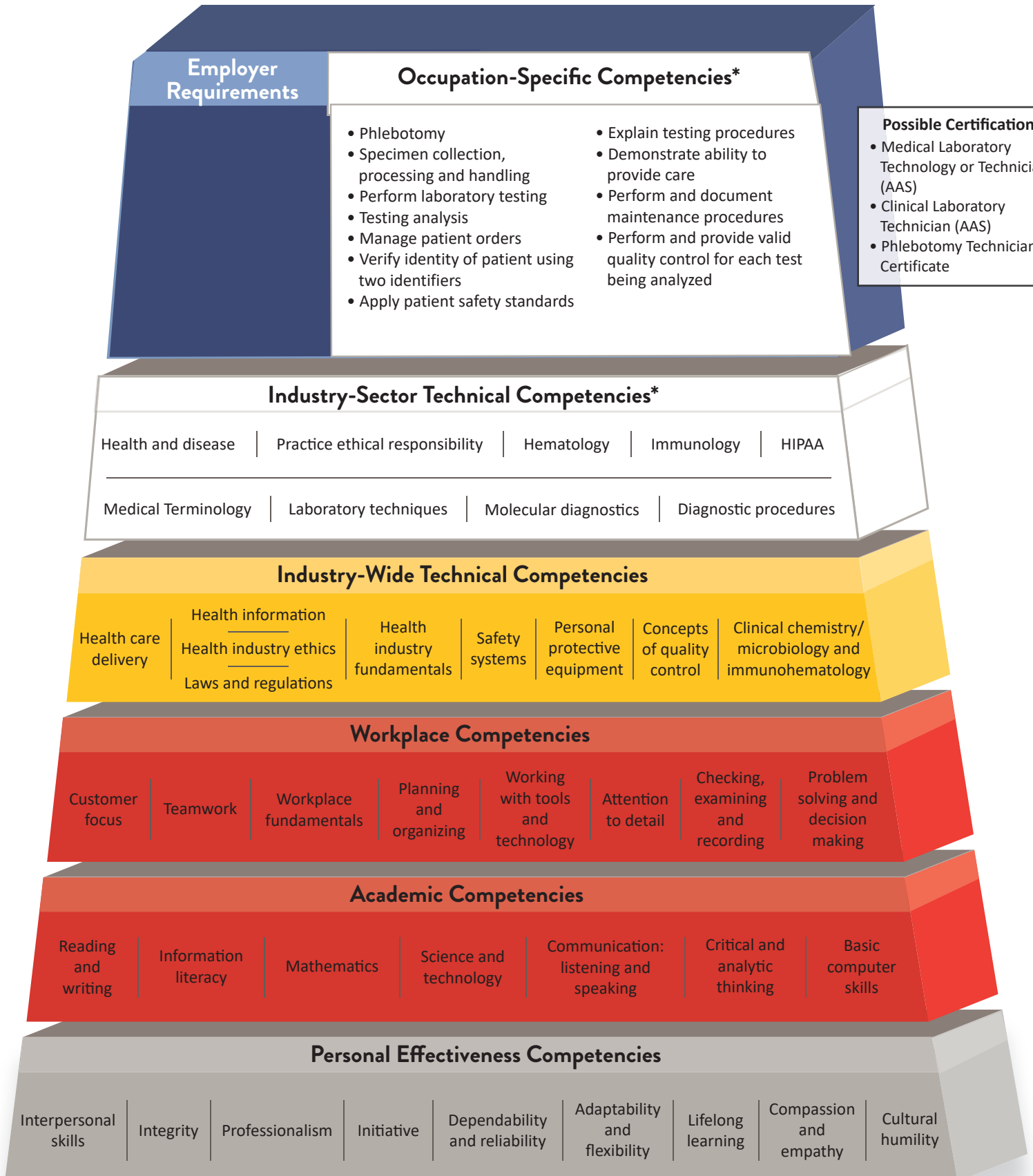


# Minnesota Dual-Training Pipeline Competency Model for Health Care Services Occupation: Medical Laboratory Technician



Based on: Health: Allied Health Competency Model Employment and Training Administration, United States Department of Labor, December 2011.

\* Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.

## Competency Model for Health Care Services

### Medical Laboratory Technician

A healthcare professional who performs chemical, hematological, immunologic, histopathological, cytopathological, microscopic and bacteriological diagnostic analyses on body fluids such as blood, urine, sputum, stool, cerebrospinal fluid, peritoneal fluid, pericardial fluid and synovial fluid, as well as other specimens. They work in clinical laboratories at hospitals, reference labs, biotechnology labs and non-clinical industrial labs.

### Industry-Sector Technical Competencies

- Health and Disease – The overall condition of an organism at a given time; disease is a disorder or malfunction of the mind or body, which destroys good health.
- Practice ethical responsibility – Medical ethics allow for people, regardless of race, gender, or religion to be guaranteed quality and principled care.
- Hematology – the science or study of blood, blood-forming organs and blood diseases.
- Immunology – the study of the human body’s built-in defense system, which protects from infection.
- HIPAA (Health Insurance Portability and Accountability Act) – Understanding of legislation that provides data privacy and security provisions for safeguarding medical information.
- Medical Terminology – Language used to precisely describe the human body including its components, processes, conditions affecting it, and procedures performed upon it.
- Laboratory Techniques – Acts performed on patient specimens to detect biomarkers and diagnose diseases.
- Molecular Diagnostics – A collection of techniques used to analyze biological markers in the genome and proteome – the individual’s genetic code and how their cells express their genes as proteins – by applying molecular biology to medical testing.
- Diagnostic Procedures – An examination to identify an individual’s specific areas of weakness and strength in order to determine a condition, disease or illness.

### Occupation-Specific Competencies

- Phlebotomy – A procedure in which a needle is used to take blood from a vein, usually for laboratory testing.
- Specimen collection, processing and handling – An integral part of obtaining a valid and timely laboratory result. Specimens must be obtained in the proper containers, correctly labeled, and then promptly transported to the laboratory.

- Perform laboratory testing – According to established protocols, perform waived, moderate or highly complex testing and report results.
- Testing analysis – any combination of the following areas may be included: Hematology, Coagulation, Microbiology, Serology, Immunology, Immunohematology, Chemistry, Urinalysis, Phlebotomy, EKG.
- Manage patient orders – Patient orders includes any documentation required for the diagnosis, treatment, and follow-up with patient, and is typically more specific to an individual’s physical and mental well-being.
- Verify identity of patient using two identifiers – Every patient, every time. To prevent instances of misidentification and near-miss error. Requirement of two identifiers – such as patient’s full name, date of birth and/or medical identification number at every patient encounter.
- Apply patient safety standards – System of care delivery that prevents errors, learns from the errors that do occur and is built on a culture of safety that involves health care professionals, organizations and patients.
- Explain testing procedures – to patients in a manner geared to gain their confidence and cooperation and relieve anxiety about the test.
- Demonstrates ability to provide care – by adjusting approaches to reflect developmental level and cultural differences.
- Perform and document maintenance procedures – and maintain adequate supplies.
- Perform and provide valid quality control for each test being analyzed – understanding accuracy of results and knowing specimen quality/acceptability.

### Possible Certifications:

Medical Laboratory Technology or Technician (AAS)  
 Clinical Laboratory Technician (AAS)  
 Phlebotomy Technician Certificate

## Medical Laboratory Technician Competency Training Plan

	Course	Course Description	Credit/Non-Credit	Hours spent on Competency
<b><i>Related Instruction Competencies</i></b>				
Health and Disease				
Practice Ethical Responsibility				
Hematology				
Immunology				
HIPAA				
Medical Terminology				
Laboratory Techniques				
Molecular Diagnostics				
Diagnostic Procedures				
<b><i>On-The-Job Training is the work experience and instruction. Training experience need not be in the exact order as listed below</i></b>				
	Trainer/Instructor	Name of person responsible for verifying competency mastery	Hours spent on competency	
Phlebotomy				
Specimen collection, processing and handling				

Perform laboratory testing			
Testing analysis			
Manage patient orders			
Verify identity of patient using two identifiers			
Apply patient safety standards			
Explain testing procedures			
Demonstrate ability to provide care			
Perform and document maintenance procedures			
Perform and provide valid quality control for each test being analyzed			