

Medical Laboratory Assisting and Phlebotomy

The hidden health profession that saves and enhances lives



Explore laboratory science careers while learning basic laboratory skills and preparing for work in the medical field. Complete coursework necessary to earn certification as a Phlebotomy Technician and a Certified Medical Laboratory Assistant.

Units of Study

- Medical Terminology
- Orientation and Safety
- Basic Laboratory Skills
- Introduction to Health Occupations
- The Clinical Lab and its Employees
- Communication and Leadership
- Legal and Ethical
- Regulations/Organizations in Medical Lab
- Phlebotomy, Infection Control and Cardio
- Special Collections for Phlebotomists
- Hematological Testing
- Immunology and Blood Banking
- Anatomy and Physiology
- Financial Literacy
- Career Connections
- Microbiology
- Urinalysis and Clinical Chemistry
- Practice Medical Laboratory
- Laboratory Assistant's Clerical Role
- First Aid/CPR
- Genetics and Genetic Testing
- Clinical Laboratory Exam Review
- Work-Based Learning Shadowing/ Internship

Integrated Academics

- English
- Science
- Health

Work-Based Learning

CTE programs bring students into the workplace for real life experiences. Businesses that supports our Phlebotomy and Laboratory Science program:

- ACM
- Catholic Health
- CSL Plasma
- Kodak
- Lidestri
- Litron
- Monroe Veterinary Associates
- Ortho Clinical
- Red Cross
- RED Rochester
- RIT
- Rochester Regional Health
- Unither
- URM
- Vasinex
- Xerox
- Zweigles

College Credits

MCC Dual Enrollment:

- CLT 100: Intro to Med Lab Technology
- CLT 110: Specimen Procurement and Processing
- HED 130: Foundations of Health & Wellness

Articulation Agreements

- Monroe Community College
- Nazareth College



Career Paths

All CTE programs correlate to many career paths.

↓ Start Here

- Phlebotomist
- Specimen Processor

Go Here ↓

with more education & experience

- Clinical Laboratory Technician
- Clinical Laboratory Scientist
- Pathologist Assistant

Explore more:

<https://www.careerzone.ny.gov/>
<https://www.onetonline.org/find/>



WEMOCO Career & Technical Education Center
Monroe 2-Orleans Board of Cooperative Educational Services
Monroe2BOCES.org/cte 585-352-2471
3589 Big Ridge Road, Spencerport, New York 14559



Medical Laboratory Assisting and Phlebotomy

Employability Profile

Work-Related Skills

Productivity and Accountability _____
Follows procedures to meet expectations and deadlines _____

Displays consistent work performance and quality of work _____

Flexibility and Adaptability

Works effectively in varied roles and responsibilities _____

Responds well to and implements feedback _____

Initiative and Self-Direction

Identifies, prioritizes, and completes tasks without direct oversight _____

Seeks to learn and develop new knowledge and skills _____

Leadership and Responsibility

Leverages strengths of others to accomplish a goal _____

Takes ownership of one's work, performance, behavior, and actions _____

Communication

Articulates thoughts and ideas clearly and effectively through speaking and writing _____

Practices active listening skills _____

Collaboration

Works effectively with others _____

Open and responsive to new and diverse perspectives _____

Critical Thinking and Problem Solving

Asks questions to lead to better solutions _____

Identifies possible options and their outcomes _____

Customer Service & EMR Skills

Demonstrate proper patient registration including demographics/insurance _____

Demonstrate proper patient registration including demographics/insurance into electronic medical records database _____

Demonstrate entering patient test results and creation of an invoice using electronic medical records database _____

Data Analysis

Create a data table in excel to organize and statically analyze data _____

Use graph to show trends in data using excel _____

Able to label genes using bioinformatics tools _____

General Laboratory Skills

Demonstrate use of pH meter _____

Demonstrate the ability to perform titration _____

Demonstrate effective use of micropipettes _____

Demonstrate how to use math to create solution for the laboratory _____

Demonstrate ability to follow a detailed multi-step procedure with no errors _____

Demonstrate ability to write and follow a standard operating procedure (SOP) _____

Demonstrate effective use of serological pipettes _____

Demonstrate maintaining laboratory notebook _____

Demonstrate ability to perform serial dilution of a sample _____

Demonstrate estimation of size of cells under a microscope _____

Lab Safety & Infection Control Practices

Implements infection control and safety practices _____

Carry out preparation of a 10% bleach solution _____

Interprets SDS and NFPA hazard rating into safe laboratory practice _____

Complies with government mandated safety practices _____

Lab Maintenance

Demonstrate preparation of reagents _____

Demonstrate maintenance of laboratory equipment _____

Maintain control of inventory using electronic inventory database _____

Ensure that supplies are stored appropriately _____

Recognize and report contamination _____

Phlebotomy Skills

Integrate OSHA bloodborne pathogen and needle stick safety into collection technique _____

Use SOPs in proper collection and preservation and transportation of clinical lab samples _____

Selection of blood tubes based on additives and requested tests _____

Integration of common medical terminology into vocabulary _____

Apply knowledge of anatomy & physiology to clinical lab samples _____

Apply knowledge of types of blood samples to tube selection _____

Demonstrate vital sign, blood pressure measurements _____

Demonstrate venipuncture using different types of collection equipment _____

Select appropriate & alternative sites for venipuncture _____

Demonstrate dermal (capillary) puncture _____

Demonstrates proper urine collection _____

Specimen Processing

Select samples that need to be rejected or recollected _____

Demonstrate specimen processing and aliquoting _____

Demonstrate usage of centrifuge and compound microscope _____

Demonstrates how to maintain data integrity _____

Legal & Ethical Responsibilities

Demonstrates procedure for informed consent _____

Demonstrates protecting PHI as described by HIPAA _____

Demonstrate the patient identification process _____

Demonstrate compliance with medical laboratory regulating agencies _____

Demonstrate compliance with OSHA regulations for the laboratory _____

Genetic Testing Skills

Carry out a polymerase chain reaction (PCR) protocol _____

Carry out a restriction digestion protocol and analyze using DNA gel electrophoresis _____

Generate a standard curve using DNA size standard and extrapolate results _____

Urinalysis

Perform physical & chemical examination of urine, using dipsticks _____

Interpret results of urine examination _____

Blood Testing

Determine patient hematocrit _____

Determine blood glucose using a POCT meter _____

Perform POCT coagulation testing _____

Demonstrate POCT blood type testing _____

Demonstrate use of a comprehensive metabolic panel using POCT analyzer _____

Microbiology

Demonstrates proper isolation and aseptic technique _____

Demonstrate basic microbiological staining _____

Demonstrate biochemical tests using plate media, in tubes or on slides _____

Demonstrate proper culturing of bacterial cells _____

Demonstrate how to make and pour sterile media using an autoclave _____

Demonstrate use of a spectrophotometer to determine cell concentration _____

Demonstrate proper wet mounting of a sample onto a slide _____