# GOAL, PURPOSE, AND OUTCOMES

## Program Goal

The goal of the Medical Laboratory Technician Program is to prepare competent entry-level technicians in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

At career entry, the medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular, and other emerging diagnostics) as the primary analyst making specimen oriented decisions on predetermined criteria including a working knowledge of critical values. The level of analysis ranges from waived and point of care testing to complex testing encompassing all major areas of the medical laboratory.

The Medical Laboratory Technician will have diverse functions in areas of preanalytical, analytical, and post-analytical processes and will be responsible for information processing, training, and quality control monitoring wherever medical laboratory testing is performed. Communication skills will extend to frequent interactions with other members of the healthcare team, external relations, customer service, and patient education.

## Purpose

**The purposes of the Northwood Tech Medical Laboratory Technician program are:**

- To provide learning experiences necessary for the individual to become a certified Medical Laboratory Technician
- To provide career mobility and a base for further education in healthcare
- To fill a need for Medical Laboratory Technicians in the Northwood Tech geographic area
- To, upon graduation, provide an opportunity to complete the Medical Laboratory Technician, MLT (ASCP) certification examination through the ASCP Board of Certification (BOC) by meeting the minimum requirements of Route 1.

## Program Outcomes

**Medical Laboratory Technician graduates will be able to:**

- Practice laboratory safety and regulatory compliance
- Collect and process biological specimens
- Monitor and evaluate quality control in the laboratory
- Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria
- Correlate laboratory results to diagnosis of clinical conditions and/or diseases
- Perform information processing in the clinical laboratory
- Model professional behaviors, ethics, and appearance

**After completion of this certificate, employers will expect students to be able to:**

- Perform various levels of complex laboratory testing procedures under appropriate supervision
- Correlate types of laboratory tests and patient history to the written diagnosis
- Collect, transport, handle, and process blood and other specimens including proper patient identification and labeling according to designated standards
- Determine pre-analytical, analytical and post-analytical variables that affect specimen collection
- Recognize conditions that might alter collections

- Demonstrate professional interpersonal skills with patients, family members, and other healthcare personnel
- Perform within legal and ethical boundaries
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts
- Integrate social, mathematical, and physical sciences in decision making
- Provide patient-centered care by utilizing proper, efficient processes across diverse populations and healthcare settings
- Minimize risk of harm to patients, providers, and self through safe individual performance and participation in system effectiveness
- Collaborate as an active member of the multidisciplinary healthcare team to provide effective patient care throughout the lifespan
- Use information and technology to communicate, manage data, mitigate error, and support decision making
- Comply with federal, state, and locally mandated regulations and policies regarding safety practices including HIPAA
- Practice standard and expanded precautions including infection control procedures