



**The University of North Carolina Wilmington**  
**MEDICAL LABORATORY TECHNOLOGIST/SPECIALIST**  
**COMPETENCY PROFILE**

Description of Work: Positions in this banded class perform a variety of bench procedures in a medical laboratory setting or perform a variety of procedures in multiple disciplines that aid in the diagnosis of disease, treatment of patients\*, and the examination of patients post-mortem. Duties performed include performing test procedures, interpreting results, resolving or attempting to resolve procedural and/or instrumentation problems, and communicating information for clinical use. Work may include serving as a lead worker and/or assisting the supervisor in management of the laboratory. Work may include instruction, training and/or coordination of educational programs.

<b>ROLE DESCRIPTIONS BY COMPETENCY LEVEL</b>		
<b>CONTRIBUTING</b>	<b>JOURNEY</b>	<b>ADVANCED</b>
<p>Employees at this level perform a variety of routine test procedures. Employees are responsible for examining specimens for acceptability, performing test procedures, interpreting results, and resolving procedural and/or instrumentation problems. Employees communicate information to clinicians. Work may include instruction and training for students and other health professionals in the performance of laboratory procedures and serving as technical resource to other staff and clinicians. Employees may supervise the daily operations of a laboratory and serve as lead worker.</p>	<p>Employees at this level perform a variety of routine and non-routine, moderately complex test procedures. Employees are responsible for interpreting results, resolving technical problems, providing clinical interface. Work may include instruction of staff and clinicians in the procedure's theoretical application and training new employees, staff, or clinicians. Employees may serve as lead worker and provide technical support to others. May supervise others.</p>	<p>Employees at this level perform specialized, complex test procedures including researching and adapting new methodology to the laboratory, providing consultation to clinicians, interpreting results, and assisting with the application of this information to the clinical situation. Employees at this level may coordinate educational programs for students, staff, and/or physicians, develop and monitor quality control programs, and serve as lead worker providing input into staff selection, performance evaluations, and laboratory planning, budget, and management. Employees may supervise others.</p>

\* human or animals

<b>Competency</b>	<b>Definition</b>
<b>Knowledge - Professional</b>	Possession of a designated level of professional skill and/or knowledge in specific area(s) and the ability to keep up with current developments and trends in area(s) of expertise, usually acquired through post-secondary education.
<b>Laboratory Testing &amp; Analysis</b>	Ability to follow standard procedures in conducting laboratory tests. Ability to check work for accuracy before completion of tasks. Ability to observe, monitor, collect, and record data. Ability to assess the accuracy, validity and integrity of the data. Ability to interpret and evaluate results.
<b>Laboratory Operations</b>	Provides oversight of technical and administrative activities in a laboratory setting - coordinates and manages supplies, equipment and related resources; monitors quality control and environmental risks; understands and complies with safety standards to maintain a safe environment. Maintains records of laboratory procedures and results in compliance with regulatory requirements.
<b>Instruction</b>	Ability to instruct and train employees, students, faculty and/or other clients by providing information, including appropriate procedures, practices and/or operation of equipment.

Competency	Contributing	Journey	Advanced
<b>Knowledge-Professional</b>	<ol style="list-style-type: none"> <li>1. Applies knowledge of a variety of laboratory procedures applicable to the areas(s) of work.</li> <li>2. Applies knowledge of laboratory equipment, instrumentation, and terminology.</li> <li>3. Applies knowledge of the basic patho-physiological processes being monitored and how medical laboratory science is applied.</li> </ol>	<ol style="list-style-type: none"> <li>1. Applies considerable knowledge of a variety of laboratory procedures applicable to the areas(s) of work.</li> <li>2. Applies considerable knowledge of laboratory equipment, instrumentation, and terminology.</li> <li>3. Applies general knowledge of the basic patho-physiological processes being monitored and how medical laboratory science is applied.</li> </ol>	<ol style="list-style-type: none"> <li>1. Applies specialized knowledge to a variety of laboratory procedures applicable to the areas(s) of work.</li> <li>2. Applies in-depth theoretical knowledge of laboratory equipment, instrumentation, and terminology.</li> </ol> <p>Applies considerable knowledge of patho-physiological processes being monitored and how medical laboratory science is applied.</p>
<b>Laboratory Testing &amp; Analysis</b>	<ol style="list-style-type: none"> <li>1. Performs routine and standardized tests following prescribed procedures; ensures quality of specimens for testing according to guidelines; recognizes deviations from expected and/or normal results.</li> <li>2. Follows specific instructions and guidelines used in the medical laboratory setting; assists in modifying procedures and methodologies and in evaluating new techniques.</li> <li>3. Prepares and analyzes some data; prepares non-routine data for analysis.</li> </ol>	<ol style="list-style-type: none"> <li>1. Performs complex laboratory procedures; recognizes deviations from expected and/or normal results; analyzes results for possible solutions.</li> <li>2. Recommends new test methodologies and/or modifies existing ones to achieve desired results; evaluates new techniques.</li> <li>3. Prepares and analyzes a variety of data; provides detailed documentation and analysis of clinical and research data.</li> </ol>	<ol style="list-style-type: none"> <li>1. Performs complex, highly-specialized laboratory procedures; develops methodologies for analyzing unusual results.</li> <li>2. Researches and adapts new test methodologies and/or modifies existing ones; evaluates and selects new techniques.</li> <li>3. Provides analysis of complex and/or data from highly specialized tests.</li> <li>4. Provides consultation to clinicians, interpreting results and assisting with the application of this information to the clinical</li> </ol>

	4. Provides test results to clinicians.	4. Provides clinical interface and discusses results with clinicians; answers inquiries about test results.	situation.
<b>Competency</b>	<b>Contributing</b>	<b>Journey</b>	<b>Advanced</b>
<b>Laboratory Operations</b>	<p>1. Coordinates and directs the work of others in the laboratory; trains others; serves as lead worker.</p> <p>2. Plans and uses laboratory resources efficiently; participates in evaluating new methods, kits, procedures, and equipment.</p> <p>3. Performs routine monitoring and maintenance of laboratory equipment.</p> <p>4. Maintains quality control.</p> <p>5. Follows health and safety measures and guidelines.</p>	<p>1. Organizes and directs the daily activities of the laboratory; participates with supervisor in work planning, staff training, evaluating work, and counseling. Serves as an expert in directing the work in specialized testing areas.</p> <p>2. Manages laboratory resources including inventory control; manages storage and acquisition of specimens; establishes priorities in the use of resources; may monitor expenditures.</p> <p>3. Researches and recommends purchase of new and/or replacement of equipment and supplies.</p> <p>4. Evaluates and modifies quality control procedures. Reviews work of others for conformance with quality control procedures; maintains quality control records.</p> <p>5. Performs safety checks; ensures compliance with health and safety guidelines. Trains others.</p>	<p>1. Directs the daily activities of the laboratory of moderate variety and/or complexity including designing workflow, work assignment, generating standard operating procedures, and arranging for alternative testing.</p> <p>2. Manages laboratory resources and facilities in a laboratory of moderate variety and complexity; establishes priorities in the use of resources and monitors expenditures.</p> <p>3. Oversees purchase of new and/or replacement of equipment and supplies; coordinates services with equipment vendors.</p> <p>4. Designs and develops quality control programs; prepares quality control reports. Serves as expert in quality control; assists affiliated laboratories.</p> <p>5. Develops and monitors health and safety guidelines in area of assignment. Serves as expert in health and safety guidelines.</p>

<p><b>Instruction</b></p>	<ol style="list-style-type: none"> <li>1. Provides instruction and training for medical technology students, new staff, physicians, and other health professionals in the performance of laboratory procedures.</li> <li>2. Serves as a technical resource to other staff and clinicians.</li> <li>3. Provides patient and classroom educational materials.</li> </ol>	<ol style="list-style-type: none"> <li>1. Develops and provides instruction and training for medical technology students, new staff, physicians, and other health professionals in the performance of laboratory procedures including specialized areas of testing.</li> <li>2. Assists in planning education programs for clinical areas.</li> <li>3. Develops and provides patient and classroom educational materials.</li> </ol>	<ol style="list-style-type: none"> <li>1. Provides formal instruction, training, and/or consultation to students, medical staff, and general public.</li> <li>2. Plans and coordinates education programs for clinical areas.</li> <li>3. Researches, designs, and develops patient and classroom educational materials.</li> </ol>
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