

CLASS CONCEPT AND RESPONSIBILITIES

The CLINICAL LABORATORY SCIENTIST performs a variety of standard and complex testing from scientific fields of immunology, bacteriology, virology, toxicology, and microbiology, and analyses at a professional level, to provide data used in the diagnosis, evaluation and treatment of human or animal disease.

Clinical Laboratory Scientists are responsible for performing routine highly specialized tests to aid in the treatment of disease. They routinely troubleshoot and communicate test results to the pathologist or treating health practitioner. They may examine blood or body fluid specimens under the microscope for bacteria, parasites, fungus or cells that might indicate disease. They may train other laboratory personnel, perform quality control checks, evaluate new instruments and implement new test procedures. Some employees in this class may oversee lower level laboratory personnel in a specialized area of expertise.

Employees in this class have clear and diversified procedures and precedents. Professional standards govern judgment used to select the most appropriate solutions. Jobs at this level have readily available professional leadership or managerial supervision. They may have situations that differ and require research to find available answers. They have independence to decide their own priorities. They may deviate from established procedures and practices provided the results meet standards as established by management.

Positions in this class are primarily found in hospitals and health institutions. They require the willingness to work in the environment associated with the position's location and purpose. Employees in this class have contact with clients and patients, in person and by telephone, on a regular basis. They have regular communication with physicians and nurses to report test results, inquire about additional tests, notify regarding unsatisfactory specimens and respond to questions regarding laboratory tests or results. Employees in this class have occasional in-person contact with students and trainees to train them in clinical laboratory procedures and with stockroom personnel to order supplies.

For work performed in a clinical setting, the Clinical Laboratory Improvement Amendments, the College of American Pathologists accreditation regulations, the Nuclear Regulatory Commission regulations, The Joint Commission, the National Committee of Clinical Laboratory standards, the Center for Medicare and Medicaid Services and State Health Division regulations set the standards for the types of laboratory tests that can be done and how they are to be performed. These standards are used as the basis for agency laboratory policies and procedures. Laboratory manuals show normal values for various tests, indicate what quality control checks to run and outline procedures for performing the tests. Equipment manuals are used as guidelines in the operation, maintenance and troubleshooting of instruments and equipment.

Laboratory Testing: Collect specimens for testing and check for proper labeling (this may include collecting appropriate specimen for testing from patients), assess quality and appropriateness of specimens with regard to tests requested. Assign accession numbers to specimens and requisition slips. Prepare specimens for analysis by diluting, filtrating, staining or centrifuging. Prepare necessary equipment and organize supplies and reagents. Run quality control samples with known values to determine if test system is within acceptable limits. Perform a variety of complex testing in immunology, microbiology, bacteriology, virology and toxicology fields. Perform tests using a variety of both standard and complicated laboratory instruments and equipment. Evaluate and analyze test results for accuracy. Determine clinical significance of test results and notifies doctor immediately of abnormal test results or problems. Enter test results into computer and report results on requisition sheets. Plot test control data onto graphs. Interpret test results to physicians and others when requested. Respond to inquiries regarding questions concerning test results.

Materials Preparation: Weigh-out chemicals and prepare reagents and media as needed. Reconstitute materials used for quality control. Perform quality control checks on all newly prepared reagents and media.

Equipment Quality Control and Maintenance: Calibrate laboratory equipment on a regular basis. Run quality control checks on calibrated equipment by checking test results against known standards to determine

accuracy of results. Clean and make minor repairs to equipment as needed. Record all actions taken in a maintenance record book.

Training: Explain laboratory test procedures, principles and theories to students, trainees and staff. Demonstrate procedures and instrument set-up, calibration and maintenance. Evaluate results of their practice tests.

Miscellaneous: Attend continuing education seminars and read related journals, periodicals and magazines to keep up-to-date on the most current laboratory procedures and technology. May test and implement new procedures. May attend continuing education courses as required by some accrediting agencies.

DISTINGUISHING FEATURES AND RESPONSIBILITIES

This is a single-level, professional class and not part of a series of classes.

The responsibilities within the Concept and Distinguishing Features are characteristic of the type and level of work associated with this class. Individual positions may do all or some combination of the responsibilities listed as well as other related responsibilities.

MINIMUM QUALIFICATIONS AND SKILLS

A Bachelor's degree in Medical Laboratory Science, Clinical Laboratory Science or Medical Technology;
OR

A Bachelor's degree in Biology, Microbiology or Chemistry AND one year of documented internship or experience in a clinical laboratory performing a variety of standard testing and examination procedures under general supervision in support of professional clinical or medical laboratory personnel.

Must have current certification as a Medical Technologist (MT), Medical Laboratory Scientist (MLS) or Clinical Laboratory Scientist (CLS).

Knowledge and Skills:

Knowledge of laboratory terminology, equipment, methods and techniques.

Knowledge of chemistry, biochemistry, biology, anatomy, physiology, immunology and mathematics.

Knowledge of the operation and maintenance of various standard and complex laboratory instruments and equipment.

Knowledge of clinical laboratory tests, their theory, how to perform them and their related pathophysiology.

Knowledge of the techniques required for general laboratory safety and the proper handling of hazardous materials.

Knowledge of microbiology - mycology and parasitology.

Knowledge of laboratory quality assurance methods.

Knowledge of medical and legal risks.

Skill in performing a variety of laboratory tests using both standard and complex laboratory equipment.

Skill in reading and following scientific laboratory methods and complex instructions.

Skill in calibrating and maintaining laboratory equipment.

Skill in recognizing abnormal values of the test results.

Skill in the proper care, handling and collection of laboratory specimens, including patient preparation, if applicable.

Skill in labeling, handling, preservation or fixation, processing or preparation, transportation and storage of specimens.

Skill in interpreting all standard laboratory procedures.

Skill in performing each test method and proper instrument use.

Skill in performing preventive maintenance, troubleshooting and calibration procedures related to each test performed.

Skill in implementing the quality control policies and procedures of the laboratory.

Skill to assess and verify the validity of patient test results through the evaluation of quality control sample values prior to reporting patient test results.

Skill in preparing clear and accurate records.

Skill in preparing laboratory reagents, solutions and media used in testing.

Skill in oral and written communications.

NOTE: The KNOWLEDGE and SKILLS (KS) are required for initial consideration. Some duties performed by positions in this class may require different KS. No attempt is made to describe every KS required for **all** positions in this class. Additional KS requirements will be explained on the recruiting announcement.

Adopted: