



STATE OF NEVADA
Department of Administration
Division of Human Resource Management

CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
LABORATORY TECHNICIAN II	27	C	10.726
LABORATORY TECHNICIAN I	25	C	10.733

SERIES CONCEPT

Laboratory Technicians perform standardized technical laboratory procedures requiring knowledge in the life and physical sciences. Scientific areas include, but are not limited to, chemistry, biochemistry, animal/veterinary sciences, biology, microbiology, pathology, pharmacology or other scientific areas in a teaching, research, or public health laboratory.

Perform routine laboratory tests as directed by professional staff; prepare a variety of standard culture media; stain and label specimens; collect/draw blood and collect urine and/or tissue samples from animal and/or human subjects; perform laboratory tests such as isolation and culture of cells, protein analysis, membrane filtration, tissue dissection, microscopic imaging of tissue; perform routine wet chemistry analyses, review of data and quality control.

Mix and prepare a variety of reagents, buffers, chemicals and solutions for classroom and laboratory demonstrations and experiments; monitor stock levels of prepared chemicals and solutions in order to ensure product are available and ready to use.

Maintain and store laboratory equipment, supplies, and inventories; prepare estimates of needed supplies; initiate purchases according to established policies, procedures and inventory levels; receive, catalog, organize, store, issue and maintain laboratory equipment, instruments, tools, solutions, supplies, hazardous chemicals and biohazardous materials in proper condition, organization and adherence to health and safety standards.

Ensure the safe handling, storage and disposal of chemicals, solutions and/or supplies which require special treatment; perform sterile procedures such as autoclaving; calibrate instruments before use; maintain instrumentation, furniture, floors, and research areas in a clean and orderly condition.

Clean, adjust and perform minor repairs to a variety of equipment, instruments, apparatus; perform record keeping duties related to the repair, operation and maintenance of laboratory equipment and machinery; issue, receive and inspect laboratory equipment and supplies to ensure proper condition; calibrate instruments before and after use; sterilize and decontaminate equipment, instruments, laboratory surfaces, glassware, and apparatus; report equipment breakage and failure. Follow Occupational Health and Safety Administration (OSHA) regulations and the Centers for Disease Control (CDC) guidelines for infection control to include documentation for preparing and testing equipment.

Establish and maintain files and records related to equipment, supplies, work performed, and experiment schedules; operate computer equipment to enter data and generate reports.

May conduct observations and record test results; sterilize and/or decontaminate equipment; and label, mount, and file specimens; prepare equipment, supplies, and specimens for testing according to standardized laboratory procedures and protocols; prepare chemical solutions; perform micro-technique and culture procedures; and prepare samples for analysis; construct and test laboratory equipment; pipette aqueous and organic fluids; prepare smear and imprint impressions; and process and section tissues.

Perform related duties as assigned.

SERIES CONCEPT (cont'd)

Representative duties within the Nevada System of Higher Education include:

In a Teaching Laboratory:

Assemble and construct apparatus, glassware, tubes, flasks, burners, microscopes and other equipment in preparation of classroom experiments; liaise with faculty to coordinate and plan lab exercises, equipment requirements, timelines, etc.; prepare and make ready chemicals, slides and solutions; issue equipment and supplies to students; test apparatus and equipment for proper functioning; demonstrate and explain techniques, equipment usage and simple experiments; observe students, answer questions, provide technical feedback and ensure health and safety protocols are followed.

In a Clinical Laboratory:

Receipt, record, label and process specimens and samples which may contain chemicals, microorganisms, acids or other biohazardous materials; evaluate specimens and samples for adequate volume, proper collection container, temperature, other; ensure samples conform to established standards; request recollection from client as needed; distribute sample results and reports to appropriate client, patient, physician, other as directed; assist clients with questions, problems and information requests.

Perform venipuncture in compliance with national standards; review and process laboratory orders; operate standards laboratory equipment and some specialized equipment; perform waived and moderately complex tests and report results to the ordering clinician in accordance with Clinical Laboratory Improvement Amendment (CLIA) standards; follow up on test results under guidance of health care providers; apply principles under the guidance of health care providers; apply principles of universal precautions, aseptic technique, and infection control; participate in quality assessment projects; utilize clinical and laboratory computer software.

In a Research Laboratory:

Support advancement of medical and scientific research through a variety of technical activities; prepare samples and specimens; conduct routine tests and procedures; order, receive, monitor and provide specialized care for laboratory animals; harvest and prepare tissues; collaborate with veterinary and research staff; identify and monitor pregnant animals; assist staff with maintenance of the breeding colony.

CLASS CONCEPTS

Laboratory Technician II: Under general supervision, incumbents perform the full range of duties described in the series concept in a designated field of specialization, and in addition, perform complex technical duties that require specialized knowledge in a specific scientific discipline and a greater understanding of scientific protocols, corresponding scientific principals and their application toward the specific project. Duties frequently require the application of judgment in identifying and selecting the most appropriate laboratory techniques which may vary with laboratory circumstances and the analytical testing required. Incumbents may be assigned supervision of lower level technicians, volunteers and/or students. Incumbents coordinate daily operations in a laboratory such as supply inventory, hazardous waste removal or animal care; may conduct literature searches on research topics, or collect, organize, store and report research information. This is the advanced journey level in the series.

Laboratory Technician I: Under general supervision, incumbents perform the full range of duties described in the series concept in a designated field of specialization. This is the journey level for the series.

MINIMUM QUALIFICATIONS

SPECIAL REQUIREMENTS:

- * Pursuant to NRS 284.4066, some positions in this series have been identified as affecting public safety. Persons offered employment in these positions must submit to pre-employment screening for controlled substances.
- * Pursuant to NRS 652.080, some positions require a State of Nevada Laboratory Assistant/Office Laboratory License issued by the Division of Public and Behavioral Health.

LABORATORY TECHNICIAN II

EDUCATION AND EXPERIENCE: Graduation from high school or equivalent education and three years of experience in a laboratory setting that involved performing various laboratory tests and experiments, and maintaining and repairing basic laboratory equipment; **OR** one year as a Laboratory Technician I in Nevada State service; **OR** an equivalent combination of education and experience as described above. (*See Special Requirements*)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Working knowledge of: specialized laboratory techniques used in a specific scientific field; materials, supplies and equipment used in a laboratory; and scientific literature and references needed to research information in the designated scientific discipline; agency policies and procedures related to laboratory operation and tests performed; analytical equipment or instrumentation used in a research, teaching or scientific laboratory; and materials and supplies used in a laboratory. **General knowledge of:** technical experimental procedures in the area of specialization; and basic data analysis. **Ability to:** perform complex laboratory tests and procedures requiring specialized knowledge and skills; perform standardized and recurring technical laboratory procedures in the biological sciences, physical sciences, social sciences or agriculture and natural resource areas in a teaching, research or public health laboratory; prepare charts, graphs or models to graphically present experimental data; operate and maintain sophisticated laboratory equipment and instruments; and conduct and modify laboratory procedures based on test results; *and all knowledge, skills and abilities required at the lower level.*

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

Working knowledge of: advanced mathematical concepts and calculations. **Ability to:** coordinate operations and supervise others as assigned; order, distribute, and maintain laboratory equipment and supplies; comprehend and apply a basic level of the science pertaining to a specific research project to carry out assignment.

LABORATORY TECHNICIAN I

EDUCATION AND EXPERIENCE: Graduation from high school or equivalent education and two years of laboratory experience performing various laboratory procedures; **OR** an equivalent combination of education and experience as described above. (*See Special Requirements*)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Working knowledge of: basic scientific theories and principles in the field of specialization; metric system weights and measures; universal precautions used in testing bodily fluids and potentially infectious tissue samples; laboratory health and safety procedures including the proper handling and storage of hazardous materials; technical experimental procedures and in the area of specialization; and math and algebra sufficient to perform calculations and take precise measurements. **Ability to:** understand and follow basic technical procedures and laboratory protocols; draw blood and collect tissue samples from animal and human subjects; receive, label and process samples and specimens for analysis and testing; and use laboratory instruments and equipment requiring manual dexterity and mechanical applications.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):
(*These are identical to the Knowledge, Skills and Abilities required for Laboratory Technician II.*)

LABORATORY TECHNICIAN II

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LABORATORY TECHNICIAN I

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This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

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ESTABLISHED:	1/19/77	7/1/70
REVISED:	7/19/87-12P 7/18/86PC	11/16/72
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REVISED:		12/11/81
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