

**CLASS TITLE:**

**PRINCIPAL CHEMIST**

**Class Code: 02726400**

**Pay Grade: 29A**

**EO: B**

**CLASS DEFINITION:**

**GENERAL STATEMENT OF DUTIES:** To be responsible for the technical operation of a chemical laboratory; to perform the most difficult and complex chemical tests and analyses; and to do related work as required.

**SUPERVISION RECEIVED:** Works under general direction with considerable latitude to exercise initiative and independent judgement in the application of approved and experimental chemical laboratory methods and techniques; work and results are subject to review through consultations and written reports.

**SUPERVISION EXERCISED:** Assigns, instructs and reviews the work of technical and other laboratory staff.

**ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:**

To be responsible for the technical operation of a chemical laboratory.

To perform difficult and complex qualitative and quantitative chemical tests and analyses.

To supervise the effective utilization and adjustment of instruments and equipment.

To seek solutions to testing difficulties or problems that arise in the laboratory or field by conducting original experimental work and library research or through discussion with authorities in the field.

To supervise and conduct experimental laboratory work to devise, where possible, more effective testing methods and techniques.

To initiate research projects by coordinating with other federal, independent, and national health agencies; to design and initiate independent research projects.

To be responsible for instructing laboratory personnel in the application of proper and effective laboratory methods and techniques.

To recommend or conduct staff training sessions as necessary.

To prepare analytical reports of analyses, findings, conclusions and recommendations.

To evaluate laboratory activities and make recommendations to superiors.

To direct and conduct quality control programs in laboratory evaluation and licensure programs.

To prepare and present scientific papers and lectures.

To prepare periodic and special narrative statistical reports.

To direct and maintain literature resources.

To make recommendations regarding prospective plans, policies and procedures pertaining to a laboratory.

To appear in court or at hearings as an expert witness.

To review laboratory activities to insure compliance with laws, regulations and standards.

To do related work as required.

**REQUIRED QUALIFICATIONS FOR APPOINTMENT:**

**KNOWLEDGES, SKILLS AND CAPACITIES:** A thorough knowledge of the principles of analytical, inorganic, organic, physical and biological chemistry; a thorough knowledge of the practices and techniques applied to sampling and performing a variety of chemical and/or microscopic tests and analyses; a thorough knowledge of laboratory methods and techniques; a thorough knowledge of laboratory instrumentation; a thorough knowledge of research techniques as related to laboratory studies;

the ability to prepare scientific reports of findings, analyses and conclusions; the ability to observe and implement safety precautions and practices; and related capacities and abilities.

**EDUCATION AND EXPERIENCE:**

Education: Such as may have been gained through: graduation from a college of recognized standing with a Bachelor's Degree in Biological or Physical Science with a minimum of eighteen (18) semester hours in Chemistry; and a Master's Degree in one of the Chemical Sciences or extensive coursework in Chemistry beyond the bachelor's level; and

Experience: Such as may have been gained through: employment in a private, public health or medical laboratory performing routine and complex chemical tests and analyses; as well as responsibility for the supervision of technical

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class Revised: October 7, 1990

Editorial Review: 3/15/03