

**CLASS TITLE:**

**FOOD SCIENTIST**

**Class Code: 02728200**

**Pay Grade: 23A**

**EO: C**

**CLASS DEFINITION:**

**GENERAL STATEMENT OF DUTIES:** To conduct standardized chemical and physical tests, analyses and examinations on a large variety of food products, including both final, marketable products and those ingredients which may be used in the production and processing of such products; and to do related work as required.

**SUPERVISION RECEIVED:** Works under the general supervision of a superior with some latitude for the exercise of initiative and independent judgement; work is subject to review for conformance to instructions and to accepted laboratory methods and procedures.

**SUPERVISION EXERCISED:** As required, may supervise the work of subordinate personnel assigned to assist.

**ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:**

To conduct standardized chemical and physical tests, analyses and examinations on a large variety of food products, including both final, marketable products and those ingredients which may be used in the production and processing of such products.

To perform qualitative and quantitative tests and analyses of food products in order to determine condition, purity, quality, and conformity to state and federal regulations.

To determine the percentage of fat, moisture, protein (by Kjeldahl nitrogen) and added water.

To perform quantification of fillers, such as nonfat dry milk.

To determine preservatives and/or antioxidants present in food products to include substances such as nitrate, ascorbic acid, benzoate and sorbate.

To determine the adulteration of meat or fish by gel electrophoresis.

To perform decomposition tests reflective of protein breakdown or fat oxidation.

To perform detection and quantification of heavy metals (including lead, cadmium, copper, chromium, zinc and mercury) in fresh fish, canned fish, shellfish and other products on occasion.

To perform chemical extraction of shellfish and sample preparation as required for bioassay of paralytic shellfish toxin.

To identify and quantitate toxins in food, especially those toxins arising from the action of certain molds and yeast's on a given food product.

To operate laboratory equipment and instrumentation needed in the performance of tests.

To attend training courses pertaining to certain instructions or techniques as required.

To perform research on methods of analysis.

To keep records of tests and analyses and to make reports thereon, including notes, tables, graphs and charts.

To do related work as required.

**REQUIRED QUALIFICATIONS FOR APPOINTMENT:**

**KNOWLEDGES, SKILLS AND CAPACITIES:** A thorough knowledge of the principles, practices and techniques of food science, chemistry and biochemistry; a working knowledge of laboratory methods and procedures; the ability in the performance of chemical tests and analyses; the ability to supervise sub-professional laboratory assistants; the ability to analyze data and present conclusions in acceptable reports; the ability to understand and follow oral and written instructions; the ability to maintain effective working relationships; the ability to observe 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 Food Science or a Bachelor's Degree in Chemistry supplemented by courses in Food Science; and

Experience: Such as may have been gained through: employment in a private, public health or food laboratory involving the making of standardized chemical and physical tests and analyses of food products. Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class Created: December 11, 1983

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