## Class Concept

This is professional microbiology work in the food, feed, and pesticide laboratory in the Department of Agriculture. Employees in this class perform a wide variety of laboratory procedures to evaluate food, feed, pesticides and occasionally cosmetics that are produced, processed or marketed in the state to ensure that they are microbiologically safe and are of the quality claimed by the producers. Under the general supervision of a lead microbiologist, employees examine products for sanitary indicators, spoilage, pathogenic organisms, disinfectant efficacy against claimed organisms) and antibiotic assay to ensure that products meet declared label claims. Employees rotate among the food, feed and pesticide units for cross-training purposes, for weekend technical support in the completion of tests, for emergencies and for support when unusually large numbers of complaints are received. Assignments in the units normally last from 6 to 12 months. Employees analyze food, feed, and pesticide samples using a wide variety of routine and non-routine laboratory procedures to evaluate the safety, wholesomeness and label claims of products. Employees perform cultural, morphological, serological and biochemical quantitative and qualitative evaluations to isolate and identify microorganisms. Employees occasionally prepare media, biological and chemical reagents and culture organisms. Work may include other related duties as assigned.

## Recruitment Standards

### Knowledge, Skills, and Abilities

- Working knowledge of the microbiological techniques involved in the extraction, culture, isolation and identification of pathogenic bacteria.
- Working knowledge of the microbiological techniques involved in the quantitative and qualitative analysis of antibiotics in feed and food products.
- Working knowledge of the microbiological techniques involved in the efficacy evaluation of disinfectants.
- General knowledge of morphological and cultural characteristics of microorganisms.
- Ability to understand and practice aseptic and sanitary laboratory techniques. Ability to perform multiple tests under stringent time restrictions.

### Minimum Education and Experience

Bachelor's degree in microbiology, food science or a related curriculum from an appropriately accredited institution and one year of related experience; or an equivalent combination of education and experience.

Note: This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA.