



Code: 3108
Family: Health and Human Services
Service: Health and Welfare
Group: Medical and Social Service
Series: Medical Technician and Laboratory

CLASS TITLE: CHIEF MICROBIOLOGIST

CHARACTERISTICS OF THE CLASS

Under direction, directs professional supervisory personnel in overseeing the conduct of microbiological analyses of water samples, and performs related duties as required

ESSENTIAL DUTIES

- Directs the collection, testing, and analyses of the City's water supply, ensuring completeness, accuracy, and compliance with testing standards and procedures
- Reviews and ensures the appropriateness of calculations, interpretations, and analyses of test results prepared by staff
- Prepares comprehensive analytical reports of the unit's research findings
- Directs the maintenance of testing records according to accepted standards to ensure continued certification of the laboratory
- Assigns and oversees specialized microbiological studies and the preparation of related reports
- Directs research into new laboratory equipment, methods, and techniques and implements changes to improve testing operations
- Directs and participates in training staff on updated analytical methods, techniques, and standard operating procedures and equipment used in microbiological testing and analyses
- Oversees and supervises the preparation of status reports regarding staff activities and assigned projects
- Monitors and prepares the unit's budget and coordinates the purchase of equipment and material
- Reviews and approves scheduling of laboratory tests, as required
- Represents the City on microbiological issues, as required
- Writes contracts for scientific equipment supply and servicing

NOTE: *The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.*

MINIMUM QUALIFICATIONS

Education, Training, and Experience

- Graduation from an accredited college or university with a Bachelor's Degree in Microbiology, Bacteriology, Biology, or a directly related field, plus four years of experience in microbiological laboratory analysis, including two years of supervisory experience; or an equivalent combination of education, training and experience provided that the minimum degree requirement is met

Licensure, Certification, or Other Qualifications

- Employees are required to obtain Illinois Department of Public Health Laboratory Certification—Registry #17506 upon 6 months of employment

WORKING CONDITIONS

- Exposure to hazardous chemicals

- Exposure to microorganisms and infectious waste
- Exposure to fumes or dust

EQUIPMENT

- Standard office equipment (e.g., telephone, printer, photocopier, fax machine, calculator)
- Computers and peripheral equipment (e.g., personal computer, computer terminals, hand-held computer, modems)
- Safety equipment
- Testing or monitoring equipment
- Microbiology equipment (e.g., microscopes, scientific calculators)
- Biological and chemical testing equipment (e.g., electron microscopes, light microscopes, x-ray analyzers)
- Laboratory equipment (e.g., sterilizers, scales, centrifuges)

PHYSICAL REQUIREMENTS

- No specific requirements

KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS

Knowledge

Advanced knowledge of:

- *applicable licensing requirements
- *applicable federal, state, local laws, regulations, and guidelines
- applicable computer software packages and applications
- *microbiological equipment, instruments, materials, and supplies
- *microbiological testing, research, and analytical practices and procedures
- *Biology

Moderate knowledge of:

- *management and supervisory methods, practices, and procedures
- *record keeping methods, practices and procedures

Some knowledge of:

- budget preparation and management methods and procedures
- procurement methods, practices, and procedures

Knowledge of applicable City and department policies, procedures, rules, regulations, and ordinances

Other knowledge as required for successful performance in the Microbiologist IV class

Skills

- *ACTIVE LEARNING - Understand the implications of new information for both current and future problem-solving and decision-making
- *ACTIVE LISTENING - Give full attention to what other people are saying, take time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times

- *CRITICAL THINKING - Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- *MATHEMATICS - Use mathematics to solve problems
- *MONITORING - Monitor and assess performance of one's self, other individuals, or organizations to make improvements or take corrective action
- *SCIENCE - Use scientific rules and methods to solve problems
- *COMPLEX PROBLEM SOLVING - Identify complex problems and review related information to develop and evaluate options and implement solutions
- *MANAGEMENT OF FINANCIAL RESOURCES - Determine how money will be spent to get the work done and account for these expenditures
- *COORDINATION WITH OTHERS - Adjust actions in relation to others' actions
- INSTRUCTING - Teach others how to do something
- *JUDGEMENT AND DECISION MAKING - Consider the relative costs and benefits of potential actions to choose the most appropriate one
- *QUALITY CONTROL ANALYSIS - Conduct tests and inspections of products, services, or processes to evaluate quality or performance

Other skills as required for successful performance in the Microbiologist IV class

Abilities

- COMPREHEND ORAL INFORMATION - Listen to and understand information and ideas presented through spoken words and sentences
- SPEAK - Communicate information and ideas in speaking so others will understand
- COMPREHEND WRITTEN INFORMATION - Read and understand information and ideas presented in writing
- WRITE - Communicate information and ideas in writing so others will understand
- RECOGNIZE PROBLEMS - Tell when something is wrong or is likely to go wrong
- REASON TO SOLVE PROBLEMS - Apply general rules to specific problems to produce answers that make sense
- ORGANIZE INFORMATION - Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations)

Other abilities as required for successful performance in the Microbiologist IV class

Other Work Requirements

- INITIATIVE - Demonstrate willingness to take on job challenges
- LEADERSHIP - Demonstrate willingness to lead, take charge, and offer opinions and direction
- COOPERATION - Be pleasant with others on the job and display a good-natured, cooperative attitude
- ADAPTABILITY/FLEXIBILITY - Be open to change (positive or negative) and to considerable variety in the workplace
- DEPENDABILITY - Demonstrate reliability, responsibility, and dependability and fulfill obligations

- ATTENTION TO DETAIL - Pay careful attention to detail and thoroughness in completing work tasks
- ANALYTICAL THINKING - Analyze information and using logic to address work or job issues and problems

Other characteristics as required for successful performance in the Microbiologist IV class

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

* May be required at entry.

City of Chicago
Department of Human Resources
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