COMPETENCY MODEL FOR
LABORATORY TECHNICIAN
CLASS CODE 7854

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of LABORATORY TECHNICIAN. (Numbers refers to the order of competencies in the Competency Bank.)

3. Judgment and Decision Making
4. Analytical Ability
6. Attention to Detail
8. Safety Focus
20. Job Knowledge
22. Computer Proficiency
28. Supervision
33. Interpersonal Skills
44. Follow Written Directions

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (italicized, bolded, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.
3. JUDGMENT AND DECISION MAKING – Accurately assesses situations, seeks new information if necessary, and applies all available information to reach sound conclusions/formulate effective response.

Level of Competency Required by Job:

Level 1:  *Training and guidelines needed to respond to immediate situations within very specific function are provided (or supervisor available to assist).*

Level 2:  General information and guidance to assist in responding to a variety of situations across a range of circumstances are provided.

Level 3:  Little guidance available for responding to a wide range of complex situations with far-reaching and/or enduring consequences.

Examples of Behavioral Indicators:

- Effectively responds to atypical situations.
- Asks questions or otherwise obtains additional relevant information to make a decision.
- Formulates a decision and necessary actions based on available facts.
- Correctly infers appropriate response based on information provided and existing policies, personal experience, and/or consultation with others.
- Discusses conclusions/possible responses with others before taking action as necessary.
- Considers impact of decisions on all affected parties.

Performance Levels:

**Satisfactory**
Correctly assesses routine and unusual situations and reaches appropriate conclusions for actions needed. Obtains additional information and/or consults with others as necessary.

**Superior**
Evaluates new situations accurately to establish an appropriate response or plan of action. Recognizes the impact on all affected parties, as well as the possible ramifications and/or repercussions of setting a precedent.
4. ANALYTICAL ABILITY – Identifies, obtains, and evaluates relevant information to establish relationships or patterns, cite causes, and reach logical conclusions.

Level of Competency Required by Job:

Level 1: Recognize similarities/differences in current situation to those previously encountered and is guided accordingly. Apply existing policies correctly. Ask pertinent questions or otherwise seek additional information to formulate appropriate response.

Level 2: **Consider multiple, varied factors when evaluating a situation or issue. Seek additional information to provide further insight. Reach conclusions that logically follow from the information obtained.**

Level 3: Consider a multitude of diverse factors, their interrelationships, the perspectives of others, alternative courses of action and their likely ramifications when evaluating information to reach a conclusion.

Examples of Behavioral Indicators:

- Obtains the necessary amount of relevant information.
- Recognizes the impact of each type of information on conclusions.
- Evaluates the quality/source of information when considering it.
- States the shortcomings of the information and, therefore, the analysis.

Performance Levels:

**Satisfactory**

Recognizes available relevant information, seeks additional information to consider, and reaches a conclusion. Provides sound, convincing justification for conclusions, citing relevant data and facts.

**Superior**

Uses a great deal of existing and obtained information and data to develop and evaluate alternatives and arrive at a final conclusion. Provides compelling arguments in support of conclusions.
6. ATTENTION TO DETAIL – Extremely careful in addressing all aspects of each work assignment in order to produce “completed staff work” and/or avoid any negative outcomes.

Level of Competency Required by Job:

Level 1: Ensure all aspects of work assignment are completed as directed.

Level 2: **Verify that each aspect of work assignment is properly completed; make logical inference regarding additional activities that may need to be performed to produce “completed staff work.”**

Level 3: Include evaluation of final work/work product in its accomplishment; make adjustments as possible to improve.

Examples of Behavioral Indicators:

- Carefully checks all aspects of work for completion and accuracy before submitting.
- Identifies errors (for example, typo’s, computations, measurements, application of laws/rules/policies) and corrects them prior to submitting.
- Cross-checks work against available resources.
- Sets up a means of checks and balances to ensure work accuracy.
- Considers changes in final work product to ensure usability by recipient.
- Completes all revisions upon request.

Performance Levels:

<table>
<thead>
<tr>
<th>Satisfactory</th>
<th>Superior</th>
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<tr>
<td>Ensures that each task accomplished represents “completed staff work.” No remaining details/ inconsistencies for others to address.</td>
<td>All aspects of each task completed are verified to be correct. Identifies any foreseeable consequences of work that may need to be addressed and does so.</td>
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8. SAFETY FOCUS – Performs work in a way that minimizes risk of injury to self or others.

Level of Competency Required by Job:

Level 1: Maintain awareness of unsafe conditions and actions to avoid injury.

Level 2: Follow safety rules/procedures; avoid known hazards in the work environment.

Level 3: Carefully follow safety rules and procedures and consistently use all necessary safety equipment.

Examples of Behavioral Indicators:

- Wears seat belt.
- Ensures safe physical work environment by taking actions such as eliminating unstable stacks of materials, closing drawers so filing cabinets will not tip over, and keeping pathways clear of tripping hazards.
- Reviews safety procedures before beginning each job with known hazards.
- Follows safety procedures while performing work even when it takes more time.
- Uses safety equipment such as goggles, gloves, and earplugs as required or warranted.
- Frequently checks safety equipment for proper condition and operation.

Performance Levels:

**Satisfactory**
Maintains awareness of personal safety to avoid injury or property damage during all work activities.

**Superior**
“Safety first.” Places avoidance of injury or property damage above all other job requirements. Mentions the need to follow safe work practices to co-workers. Actively seeks ways to avoid injury.
Safety Focus Areas

1. Knowledge of Cal/OSHA safety regulations related to personnel protective equipment (PPE) and the operation and use of safety devices, such as emergency showers, fire extinguishers, eye wash stations, and proper lab attire, sufficient to ensure personal and team safety.

2. Knowledge of Cal/OSHA safety regulations related to chemicals, including those related to storage, labeling, Safety Data Sheets (SDS), disposal, and spillage, sufficient to ensure personal and team safety.

3. Knowledge of regulatory guidelines from organizations, such as the State Department of Health Services and Water Quality Control Board, sufficient to accurately follow Standard Operating Procedures (SOPs) and safety guidelines.

4. Knowledge of state, local, and federal environmental regulations and standards, such as Environmental Protection Agency and state water board regulations, sufficient to ensure safety compliance.
20. **JOB KNOWLEDGE** – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

**Level of Competency Required by Job:**

**Level 1:** *Knowledge is concrete, factual, and/or procedural and may be defined by the organization. Situations in which it is applied are quite consistent.*

**Level 2:** Knowledge is substantive and may be defined by an external trade, field, or profession. Situations in which it is applied vary and, as such, require breadth and depth of understanding.

**Level 3:** Knowledge is abstract, conceptual, and/or complex and may be supported by a well-defined academic discipline or authoritative sources (e.g., laws, ordinances, government guidelines/regulations/codes). Situations in which it is applied may vary greatly or be novel.

**Examples of Behavioral Indicators:**

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.
- Sought out as a source of information by others.

**Performance Levels:**

**Satisfactory**

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

**Superior**

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/programs and/or give internal and/or external presentations related to work.
Job Knowledge Areas

1. Knowledge of the properties of water, such as stability, corrosiveness, turbidity, bacterial level, and hardness sufficient to monitor water quality.

2. Knowledge of the properties of chemicals, such as flammability, corrosiveness, oxidization, solubility, volatility and toxicity, chemical compatibility, proper order of mixing, and proper location for mixing, sufficient to ensure a safe working environment.

3. Knowledge of the proper quality and composition of effluent water and its content of pollutants, such as how much bacteria and toxic substances the water should contain, sufficient to determine its impact on beaches and marine life.

4. Knowledge of the matrix of a sample, including the interference of other chemicals in the sample and how it affects tests, sufficient to carry out further testing, process a sample, and obtain valid testing results.

5. Knowledge of the regulations and procedures for sample testing and methodologies enacted by regulatory agencies sufficient to maintain compliance.

6. Knowledge of Quality Assurance regulations, programs, and documentation requirements related to the lab sufficient to uphold regulations and ensure a high standard of performance and data quality.

7. Knowledge of proper sample collection procedures, such as those related to types of containers, proper preservatives, sampling points and frequency, and proper handling procedures, sufficient to provide valid sample results.

8. Knowledge of the proper use and handling of basic laboratory equipment, such as volumetric glassware, analytical balance, stirring motors, heating devices, conductivity and other meters, sufficient to ensure lab safety and perform tests.

9. Knowledge of measurement systems, such as the English and metric system, sufficient to read and record results.

10. Knowledge of laboratory procedures, including distillation, extraction, evaporation, concentration, isolation, filtration, sufficient to complete sample preparation tasks.

11. Knowledge of physical principles of commonly used analytical instruments, such as light absorption, heat and wavelength, sufficient to operate instruments properly.
12. Knowledge of organic chemistry as related to types of organics, and the structure/function relationship sufficient to understand their adverse effects to human health and the environment.

13. Knowledge of biology and microbiology sufficient to perform biological and microbiological analyses.

14. Knowledge of polymer chemistry sufficient to determine what level of active ingredient in polymer is appropriate for treatment processes and to determine dosage of materials requested from vendors.

15. Knowledge of stoichiometry, such as the preparation of reagents and understanding chemical reactions, sufficient to maintain safety and complete tasks.

16. Knowledge of analytical chemistry and microbiological analysis techniques, including qualitative and quantitative analysis, sufficient to identify compounds and microorganisms, measure the concentration of the compound, and establish standard curves.
22. COMPUTER PROFICIENCY – Uses computer hardware and software optimally to perform job tasks efficiently and effectively.

Level of Competency Required by Job:

Level 1: **Understand and use the basic function(s) of computer hardware and software to perform work.**

Level 2: Advanced understanding and use of function(s) of all necessary computer hardware and software to perform work.

Level 3: Expert understanding and ability to use all necessary computer hardware and software for the full range of their functions.

Examples of Behavioral Indicators:
- Correctly uses all necessary computer hardware (for example, keyboard, mouse, external storage devices, scanner, printer).
- Correctly and efficiently uses all necessary computer software (for example, wordprocessing, spreadsheet, and database/analysis programs and specific-purpose programs to perform work).
- Performs work with a minimal number of steps (separate computer operations).
- Uses various means of storing and backing-up work as appropriate to the access requirements (need to share) and sensitivity/security concerns.

Performance Levels:

**Satisfactory**
- Correctly uses all necessary computer hardware and software.
- Learns to use new hardware and software readily.
- Does not perform work manually when more efficient means via computer are available.

**Superior**
- Optimally uses all required computer hardware and software. When alternatives exist, selects the best way to perform work on the computer.
- Coaches others (or provides formal training) in computer use to perform the job.
Computer Proficiency Areas

1. Knowledge of computer management software, such as the Laboratory Information Management System (LIMS), sufficient to use a laboratory data station for data acquisition and data processing.

2. Knowledge of the capabilities of computers and software, such as Microsoft Office Suite and Google Docs.
28. SUPERVISION – Ability to assume direct responsibility for all aspects of the performance of a work group, which requires knowledge and/or ability in the areas of:

- Planning and goal setting
- Creating a safe and positive work environment
- Establishing standards and training employees
- Motivating employees and teambuilding
- Performance Management (assigning, monitoring, facilitating, reviewing and evaluating work, and providing feedback)
- Supporting and developing employees through delegation and participation
- Taking disciplinary action including progressive discipline
- Provisions of employees' MOU’s and handling grievances
- Legal requirements including EEO, ADA, FLSA, FMLA, and Workers’ Compensation provisions
- Civil Service Commission Rules and Policies related to the management of employees
- Administrative Code provisions related to the management of employees
- Budget processes sufficient to request and justify expenditures in a correct and timely manner

Level of Competency Required by Job:

**Level 1:** Supervises small workgroup of employees performing the same or highly related work.

**Level 2:** Supervises a larger workgroup of employees performing various types of work.

**Level 3:** Supervises employees including provision of coaching and advice to subordinate supervisors.

Examples of Behavioral Indicators:

- Plans, assigns, and monitors work progress.
- Trains employees to do work.
- Evaluates work and gives positive and negative feedback.

Performance Levels:

**Satisfactory**

Proficiency in supervision sufficient to supervise a workgroup in terms of task orientation, interpersonal concerns, and personnel administration.

**Superior**

Proficiency in supervision sufficient to serve as a resource to others and/or represent department position in a public forum.
33. INTERPERSONAL SKILLS – Interacts effectively and courteously with others.

Level of Competency Required by Job:

Level 1:  *Interact with members of the workgroup, supervision, and/or the public in a cordial, service-oriented manner.*

Level 2:  Interact across department lines and with appointed City officials, and/or members of the public, at times under adversarial circumstances, in a cordial, respectful manner.

Level 3:  Interact with appointed and elected City officials, department heads, representatives of external organizations, and/or the media in a cordial, effective manner.

Examples of Behavioral Indicators:

- Works well with others toward mutual objectives.
- Does not arouse hostility in others.
- “Disagrees without being disagreeable.”
- Elicits acceptance/cooperation from others.
- Affords all individuals respect, regardless of their role or status.
- Effectively addresses concerns of politicians or others who may have their “own agenda.”

Performance Levels:

**Satisfactory**

Behaves in a courteous, respectful, cooperative manner toward co-workers, other City employees, and members of the public.

**Superior**

Facilitates positive interpersonal relations within/among workgroups and toward members of the public. Adept at finding similarities and grounds for cooperation/mutual benefit.
44. FOLLOW WRITTEN DIRECTIONS – Performs work accurately as directed in writing.

Level of Competency Required by Job:

Level 1: Perform tasks assigned in writing.
Level 2: Perform work after reading instructional manual.
Level 3: Perform work after completion of training modules or programs presented in writing.

Examples of Behavioral Indicators:

- Correctly completes work assigned in writing.
- Answers questions and/or explains work to others who received the same instructions.
- Learns and applies information presented in writing (instruction manual; training program).
- Correctly infers details of work to be performed that were unclear or omitted as presented in writing.

Performance Levels:

**Satisfactory**
Correctly performs work assigned or for which training was provided in writing.

**Superior**
Understands instructions and training materials presented in writing to the extent that is able to answer questions or explain to others. Correctly infers unclear or omitted details as presented in writing.