

COUNTY OF SOLANO
CLASS SPECIFICATION
CRIMINALIST

CLASS SUMMARY:

The Criminalist conducts forensic laboratory analyses of physical evidence, investigates crime scenes, and testifies in court as an expert witness on the subjects of forensic analyses and crime scene investigations.

Distinguishing characteristics within the class are based on assignment and years of experience. The independence of work and the complexity and scope of responsibilities increase with knowledge and experience.

At entry level, incumbents have little or no previous forensic casework experience. Incumbents receive on-the-job training in one or more of the core forensic disciplines, learning to apply the required body of knowledge. They perform fundamental, routine forensic scientific casework of moderate difficulty and within established parameters that are designed to develop broader and more in-depth knowledge and skill. This is the training and developmental level.

At the journey level, incumbents independently perform technically complex and difficult forensic scientific casework in one or more forensic disciplines; assist in training laboratory staff and law enforcement officers; and may conduct crime scene investigations. May be assigned specialty assignment as Laboratory Safety Officer. This is the full journey level.

At the senior level, incumbents perform the most technically complex, difficult, or highly sensitive scientific casework in one or more forensic disciplines; conducts crime scene investigations; researches and develops new methods and/or lead oversight and training of laboratory staff on a regular and recurring basis. May be assigned specialty assignment as Laboratory Quality Assurance Manager, DNA Technical Leader, or Laboratory Information Management System (LIMS) Administrator.

This Criminalist is distinguished from the:

- **Forensic Laboratory Technician** class, which assists professional laboratory staff in performing a variety of technical and clerical functions to support operations; conduct routine evidence examinations; maintains laboratory supplies, equipment and facilities; maintains records; and documents activities.
- **Criminalist Supervisor**, which is a first-line supervisory class responsible for assigning, reviewing, and coordinating the daily operations of the forensic laboratory and work activities of professional, technical, and support staff.

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ESSENTIAL DUTIES:

This class specification represents the core areas of responsibilities; specific position assignments will vary depending on the needs of the department.

Performs physical and chemical examinations of physical evidence using quantitative and qualitative laboratory techniques, procedures, and approved protocols.

Evaluates nature, origin, and significance of evidence in criminal cases in the laboratory and in the field.

Makes accurate observations regarding examinations.

Maintains chain of custody and integrity of evidence.

Prepares detailed notes and comprehensive written reports regarding examinations.

Presents fair and impartial court testimony concerning findings as established by laboratory analyses and practices and interprets findings as a qualified expert witness.

Maintains laboratory equipment, instruments, and work areas.

Provides training, guidance, and technical assistance to laboratory staff, law enforcement personnel, and other users of laboratory services in collecting, preserving, analyzing, and interpreting physical evidence.

Researches technical journals, textbooks, chemical manuals, and other source materials to determine the best methods of performing analytical testing.

Performs other duties of a similar nature and level as assigned.

Training And Experience:

Bachelor's degree from an accredited college or university with a major in chemistry, forensic chemistry/science, biochemistry, toxicology, criminalistics, or a closely related physical or natural science field that included 20 semester / 30 quarter units of general chemistry, organic chemistry (two courses), quantitative techniques, and laboratory sections;

and

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Training And Experience: (Continued)

At entry level requires: No experience

At journey level requires: Two years of full-time directly related experience in a class comparable to Solano County's Criminalist.

At senior level requires: Four years of full-time directly related journey-level experience in a class comparable to Solano County's Criminalist in one of the following areas: firearms and tool mark comparisons; forensic biology/DNA, trace and impression evidence examinations, drug analysis, and/or forensic alcohol or toxicology.

Note A: Master's degree or higher in one of the scientific fields noted above is desirable and may be substituted for one year of the required experience.

Note B: Assignment as a DNA Technical Leader requires three years of forensic DNA analysis experience.

Licensing/Certification Requirements:

- Employees conducting forensic alcohol analyses must be eligible to conduct such work as specified by the State of California at the time of appointment
- California Driver's License, Class C
- Some positions may require a Forensic Alcohol Supervisor certification issued by the California Department of Health Services.

Knowledge of:

At entry:

- Principles of scientific methodology
- Principles of chemistry, biology, biochemistry, physics, physiology, and statistics as related to analytical laboratory work
- Laboratory safety precautions and procedures
- Standard office procedures, practices, equipment, personal computers and software
- Methods, techniques, materials, operations, equipment, apparatus, and automated systems used in a modern crime laboratory
- Principles and techniques of quality control and quality assurance

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Knowledge of: (Continued)

Additionally at journey:

- Applicable federal, state, and local laws, codes, rules, regulations, and statutes
- Common types of evidence such as narcotics, toxins, trace evidence, firearms, and biological evidence
- Laws of evidence, criminal procedures, courtroom procedures and testimony
- Current trends in forensic science, including recent court decisions and legislative developments

Additionally at senior:

- Principles, procedures, and techniques of modern forensic and criminal investigation, identification, and analyses
- Firearms and tool mark comparisons
- Forensic biology/DNA
- Trace and impression evidence examinations
- Drug analysis
- Forensic alcohol or toxicology
- Principles of leadership and supervision

Skills in:

At entry:

- Preparing reports, records, correspondence, statistical documentation, and other written materials
- Adhering to established codes of ethics
- Working under physical and mental pressure and in potentially hazardous situations and environments
- Establishing and maintaining constructive and cooperative relationships with those contacted in the course of work; demonstrating tact, diplomacy, patience, and compassion
- Performing a variety of chemical, instrumental, and forensic laboratory analyses in accordance with prescribed procedures
- Using computers and software office and scientific applications
- Working under pressure to meet timelines and handling multiple and changing priorities; prioritizing and coordinating project timelines and schedules

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Skills in: (Continued)

Additionally at journey and senior:

- Interpreting and applying departmental, local, state and federal codes, ordinances, laws, regulations, and policies
- Operating and maintaining a wide variety of forensic laboratory, scientific, photographic, and safety equipment and instruments
- Identifying, observing and analyzing problems, identifying alternative solutions, projecting consequences of proposed actions, and implementing recommendations
- Promoting and enforcing safe work practices and handling of biohazards and/or hazardous chemicals and materials
- Communicating complex and scientific information clearly and concisely both orally and in writing; testifying in court as an expert witness

Other Requirements:

Independent travel is required

Work irregular hours, holidays, and weekends at various locations and in hazardous conditions

ADA Requirements:

Positions in this class typically require reaching, walking, fingering, feeling, talking, hearing, seeing, and repetitive motions. Standing, walking, and/or sitting for long periods, such as while conducting analysis in the laboratory or processing a crime scene. Moving with sufficient personal agility to collect and process evidence at crime scenes, such as clandestine drug laboratories, automobiles, trash bins, etc. Possessing sufficient manual dexterity to manipulate and operate laboratory equipment. Visually distinguish color, shape, size, number, and picture resolution quality. Withstanding exposure to disagreeable elements such as extreme weather conditions, malodorous and/or decomposing samples, blood, bodily fluids, etc.

Heavy Work: Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.

Class History Information:

Approved by CSC April 8, 2009