

GENERAL DESCRIPTION OF CLASS

The FORENSIC SCIENTIST 2 is the primary scientist in a specific forensic discipline engaged in forensic research and applications within the Oregon State Police Crime Laboratory. The Forensic Scientist 2 provides technical oversight of a specific forensic discipline and within that discipline provides associated research, acts as the lead scientist in local and statewide forensic issues, trouble shoots problems of methodology and analysis, performs complex laboratory analyses, prepares written reports, and testifies as an expert witness in courts of law on specific methodologies as well as own and other's casework.

DISTINGUISHING FEATURES

This is the third level of a three-level series. It is distinguished from the lower levels by the emphasis on research and development and the responsibility for oversight, implementation, and training in the methodologies and techniques of a specific forensic discipline (e.g., DNA). Casework is of a greater diversity and includes greater independent planning, problem solving, and research in order to conduct examinations and analysis of evidence. This level develops training in a specific forensic discipline, assists in that training, acting as an advisor to casework approaches, and provides courtroom testimony in key criminal cases where enhanced expert testimony is necessary to support the State's methodology and procedures in a specific forensic area.

DUTIES AND RESPONSIBILITIES

The duties listed below are not inclusive but characteristic of the type and level of work associated with this class. Individual positions may perform all or some combination of the duties listed below as well as other related duties.

1. Research and Development

Researches and evaluates new forensic techniques and new product equipment. Provides recommendations to unit commander on modifications to existing techniques and needed scientific equipment.

Tests new techniques and modifies or incorporates them into analysis procedures and courtroom testimony.

Develops new or refined methodologies to produce greater efficiency and accuracy in the program and oversees the technical implementation of any new programs or enhancements.

Reviews operations, validates studies and sets up quality control for analysis.

2. Training

Develops aspects of training programs in specified area of expertise and assists in the training of forensic scientists and law enforcement personnel.

Serves as resource person for other forensic scientists and acts as lead person/job coach coordinating the training and work of lower level forensic personnel.

3.Courtroom Testimony

Provides testimony in support and review of this or other State's forensic methodology in his/her specific forensic discipline. Testifies as the agency forensic expert in designated discipline, defining, and defending the methodology.

Provides testimony in support of own casework or the work of any forensic scientist in the State Police Crime Laboratories.

4.Laboratory Analysis

Selects appropriate methods, techniques, and instruments to examine and analyze evidence in complex cases where interpretations tend to be subjective. Casework involves analysis of evidence in a specific forensic discipline.

5.Evidence Documentation

Assists law enforcement agencies in processing crime scenes. Documents and protects evidence according to laboratory procedures, ensuring that the chain of custody is maintained.

Provides conclusions and opinions in the form of written reports based on the interpretation of observations and analytical test results.

6.Miscellaneous

Maintains laboratory equipment and instruments and participates in proficiency and quality assurance testing.

Follows current developments and theories in designated area of forensic science through literature and contacts with other experts.

Tests new techniques and modifies or incorporates them into analysis procedures and courtroom testimony.

Gives informational lectures and/or tours to the general public.

RELATIONSHIPS WITH OTHERS

Employees in this class have regular daily telephone and in-person contact with other State Police personnel, staff, and personnel from other police and law enforcement departments or agencies, district attorneys' offices, forensic scientists, or criminalists in or outside the State, and the general public.

Employees in this class also have occasional contact with vendors regarding scientific equipment and supplies.

SUPERVISION RECEIVED

Employees in this class perform casework independently under the general direction of a laboratory supervisor.

GENERAL INFORMATION

Employees in this class work in the Oregon State Police Crime Laboratories located in central and remote locations throughout the State. They require the willingness to work within the environment associated with the position's work and to follow proper safety precautions and practices.

Employees in this class are subject to handling firearms, broken glass, syringes, odoriferous materials, blood, urine, and other body specimens which may come from diseased persons or clothing which may be infected with biological contaminant. They may be required to work with caustic and flammable fluids or be exposed to toxic, carcinogenic, radioactive, or otherwise hazardous substances.

KNOWLEDGE AND SKILLS (KS)

- Extensive knowledge of organic and inorganic chemistry, physics, biology, and mathematics.
- Extensive knowledge of analytical instruments and scientific search methods.
- Extensive knowledge of laboratory principles, terminology, material, equipment, procedures, and techniques.
- Extensive knowledge of preservation techniques of various items of submitted evidence.
- Extensive knowledge of criminal investigation techniques, laws of search and seizure, and court protocol.
- Extensive knowledge of proper handling of hazardous chemical and biological materials and other potentially hazardous items of evidence.
- Extensive knowledge of test procedures to identify and compare a variety of materials (blood, hair, fibers, glass, soil, etc.) and the equipment necessary to conduct tests.
- General knowledge of safe handling and operation of various types of firearms.
- General knowledge of photographic techniques.
- Basic knowledge of and ability to work within specific agency operations, rules, policies, and procedures.

- Skill in oral and written communication to gather and exchange information or respond to questions.
- Skill in assisting law enforcement officers to properly collect and preserve evidence, using scientific methods and techniques at crime scenes.
- Skill in conducting firearm, bullet, and tool mark comparisons.
- Skill in preparing reports which contain results of scientific analysis written in a manner understandable to lay persons.
- Skill in organizing and prioritizing work and in making judgments regarding a course of action or work methods.
- Skill in training other forensic scientists and other personnel of the criminal justice system.
- Skill in recognizing the need for, developing, and evaluating new test methods and procedures.

NOTE: The KNOWLEDGE and SKILLS are required for initial consideration. Some duties performed by positions in this class may require different KS's. No attempt is made to describe every KS required for **all** positions in this class. Additional KS requirements will be explained on the recruiting announcement.

Adopted 1/92

Revised