

GENERAL DESCRIPTION OF CLASS

The FORENSIC SCIENTIST 1 performs complex laboratory analyses on physical evidence, devising analytical approaches to case work which may include problematic research and/or generating or modifying methods, and interprets analytical results, prepares written reports, and testifies as an expert witness in courts of law.

DISTINGUISHING FEATURES

This is the second level of a three-level series. The greater diversity of case work and the independent planning, problem solving and research required in conducting examinations and analysis of evidence distinguishes the class from the lower level. At this level, new procedures from the forensic community are evaluated and implemented. The Forensic Scientist 1 actively participates in training other forensic scientists and acts as an advisor to casework approaches.

Lack of responsibility for oversight, implementation and training in the methods and techniques of a specific forensic discipline (e.g., DNA) and less emphasis on research and development distinguishes this class from the higher level.

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.Laboratory Analyses

Selects appropriate methods, techniques, and instruments to examine and analyze evidence in cases where interpretations tend to be subjective.

Case work involves analyses of evidence for 1) separation and detection of controlled substances from complex mixtures, non-routine samples, designer drugs and other drug analogs, and chemicals associated with clandestine drug syntheses; 2) identification and typing of biological substances, body fluids and stains and mixtures; 3) physical comparison of firearms and tool mark evidence, including firearm and cartridge/bullet identification, case ejection and ricochet patterns, proximity and trajectory determinations, and serial number restorations; 4) comparison of hair, fibers, paints, plastics, glass, soil, and other trace elements; 5) explosives residue/accelerant identification; 6) pattern, such as blood spatter, footprint, tire mark, analysis and interpretation; and 7) toxicological analysis of body fluids to provide expert testimony on levels/effects.

2.Evidence Documentation

Independently 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 a written report based on the interpretation of observations and analytical test results.

Testifies as an expert witness in courts of law.

3.Training

Assists in the training of other forensic scientists and law enforcement personnel.

May develop training programs.

May perform duties as lead person/job coach coordinating the work and training of lower level forensic personnel.

4.Miscellaneous

Maintains laboratory equipment and instruments.

Participates in proficiency and quality assurance testing.

Certifies breath-alcohol testing equipment.

Follows current development and theories in forensic science through literature and contact with other experts.

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

RELATIONSHIP 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.

May contact vendors regarding scientific equipment and supplies. Provides expert testimony in courts of law and makes public relation lectures and/or tours to the general public and training to law enforcement personnel.

SUPERVISION RECEIVED

Employees in this class perform case work 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 location.

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. Positions in this class must be willing to follow proper safety precautions and practices.

KNOWLEDGE AND SKILLS (KS)

General knowledge of organic and inorganic chemistry, physics, biology, and mathematics.
General knowledge of analytical instruments and scientific search methods.
General knowledge of laboratory principles, terminology, material, equipment, procedures, and techniques.
General knowledge of proper safety precautions and techniques.
General knowledge of microscopy theory, techniques, and equipment.
Basic knowledge of experimental design, controls, and standards.
Basic knowledge of photographic techniques.

Skill in oral and written communication to gather and exchange information.
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 recognizing the need for, developing, and evaluating new test methods and procedures.
Skill in operating scientific instruments.

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