

WASHINGTON DEPARTMENT OF PERSONNEL

Specification for Class of

FORENSIC SCIENTIST 4 (53890)

Abolished Effective June 1, 2005

Class Series Concept:

This series reflects professional level requirements and standards for conducting work as a forensic scientist in one or more of the following forensic science disciplines: DNA, controlled substances, chemistry, trace evidence, fire debris, explosives, questioned documents, latent prints, firearms and toolmarks, toxicology, and crime scene investigation. Because the most responsible activity of a forensic scientist is to help prove or disprove the elements of a crime that may lead to the identification of the person(s) responsible, the primary functions include: examination and/or collection of evidence; analysis of the physical evidence using accepted and validated methods and analytical instrumentation; preserving evidence according to laboratory procedures; maintaining chain of custody, i.e., documentation establishing the receipt, handling, and disposition of evidence; interpreting observations and test results; preparing written opinion reports; testifying as an expert witness in courts of law; participating in proficiency testing; and receiving on-going training and professional development.

Definition: Supervises forensic scientists and support staff within a full or limited-service forensic laboratory and performs complex analyses in criminal cases submitted to the forensic laboratory. Interprets analytical results, prepares written opinion reports, and testifies as an expert witness in courts of law.

Distinguishing Characteristics: As working supervisors of an assigned forensic discipline(s), these positions are also responsible for performing complex analysis on physical evidence. This involves casework where applied research, method modification, or a unique approach may be necessary; or a single definite conclusion is not possible and a weighted conclusion is warranted; or casework requiring the reconstruction of an event or series of events based upon the interpretation of physical evidence.

Typical Work

Supervises forensic scientists in a crime laboratory;

Documents and protects evidence according to laboratory procedures, ensuring that the chain of custody is maintained;

In an assigned forensic science discipline, examines and analyzes evidence in complex case requests, where interpretations could lead to less definitive weighted conclusions, selecting appropriate methods, techniques, and instruments;

Reports findings in the form of a written laboratory report based on the interpretation of observations and analytical test results;

Participates in a forensic examination self-study program to remain current in the field and improve supervisory skills;

Assists the laboratory manager with general operations as needed;

May respond to requests for assistance at crime scenes;

Testifies as an expert witness in a court of law;

Provides peer review and participates in proficiency testing to maintain expertise;

Trains other forensic scientists and law enforcement officers;

Maintains the laboratory good working order;

Performs other work as assigned.

Knowledge and Abilities

Knowledge of: organic, inorganic, and analytical chemistry; physics (especially optics); biology; statistics and mathematics; modern analytical instruments; scientific literature search; scientific method; elementary logic; laws of evidence; supervisory responsibilities and practices; capabilities and interrelationships of the several technical areas of a crime laboratory.

Ability to: supervise subordinates; apply basic scientific principles to evaluate alternative and new methods and techniques; form opinions and prepare written reports based on test results, observations, and knowledge; speak clearly in public; operate and maintain scientific instruments; comprehend and follow oral and written instructions; make responsible decisions under pressure.

Minimum Qualifications

A Bachelor of Science degree in forensic science, natural science, or closely related field which includes a minimum of 20 semester hours or 30 quarter hours of chemistry and 5 semester or 8 quarter hours of physics.

Examples of closely related fields, including but not limited to, are: Pharmacology, Medical Technology, Genetics, Cellular or Molecular Biology, Analytical Chemistry, Biochemistry, Clinical Chemistry, Nuclear Chemistry, or Toxicology.

AND

Five years of technical experience in a forensic science laboratory which includes two years performing analyses of physical evidence and testifying as an expert witness in courts of law.

For DNA positions, applicants must have successfully completed at least one undergraduate or graduate level course in each of the following subjects: **Biochemistry, Genetics, and Molecular Biology.**

New class: 2-15-74

Revised: 12-10-87

Revised definition, minimum qualifications, general revision, and title changed (formerly Criminalist 4): 4-1-88

Revised definition and minimum qualifications: 12-9-94

Revised definition and minimum qualifications, added class series concepts and distinguishing qualifications: 9-13-02