



## DPS-FORENSIC SCIENTIST II

### **CHARACTERISTICS OF WORK:**

This is professional work in the field of forensic sciences conducting independent analyses to identify and compare physical evidence, providing technical instruction on forensic related topics, presenting expert testimony in courts of law, and consulting with law enforcement officers, attorneys, pathologists, and other members of the criminal justice system. Employee carries out the requirements called for in the section's standard operating procedure manual under the direction of the appropriate section chief. The omission of specific statements does not preclude management from assigning specific duties not listed herein if such duties are a logical assignment to the position.

### **MINIMUM QUALIFICATIONS:**

These minimum qualifications have been agreed upon by Subject Matter Experts (SMEs) in this job class and are based upon a job analysis and the essential functions. However, if a candidate believes he/she is qualified for the job although he/she does not have the minimum qualifications set forth below, he/she may request special consideration through substitution of related education and experience, demonstrating the ability to perform the essential functions of the position. Any request to substitute related education or experience for minimum qualifications must be addressed to the State Personnel Board in writing, identifying the related education and experience which demonstrates the candidate's ability to perform all essential functions of the position.

### **EXPERIENCE/EDUCATIONAL REQUIREMENTS:**

For DPS-Forensic Scientist II positions in the disciplines of Toxicology, Controlled Substance Identification, Fire Debris Analysis, Trace Evidence, and Implied Consent, applicants must possess the following:

#### **Education:**

A Bachelor's degree from an accredited four-year college or university in Chemistry or any other Natural Science, Physical, or Forensic Science with a minimum of 24 semester hours of chemistry which must include Analytical Chemistry;

**AND**

#### **Experience:**

Four (4) years of experience in a laboratory environment performing related work.

For DPS-Forensic Scientist II positions in the disciplines of Questioned Documents, Latent Prints, Firearms, and Technical Assistance Unit, applicants must possess the following:

**Education**

A Bachelor's degree from an accredited four-year college or university;

**AND**

**Experience:**

Four (4) years of experience in a laboratory environment performing related work.

**Special Requirements:**

Must be certified, or eligible for certification, to conduct independent professional case analyses by the Mississippi Crime Laboratory.

Must be certified, or eligible for certification, as an instructor with the Mississippi Board of Law Enforcement Officer's Standards and Training.

**Required Document:**

Applicant must attach a valid copy of his/her official transcript or other evidence to verify completion of required coursework.

**PHYSICAL REQUIREMENTS:**

These physical requirements are not exhaustive, and additional job related physical requirements may be added to these by individual agencies on an as needed basis. Corrective devices may be used to meet physical requirements. These are typical requirements; however, reasonable accommodations may be possible.

**Moderate Work:** May frequently exert force equivalent to lifting up to approximately 25 pounds and/or occasionally exert force equivalent to lifting up to approximately 50 pounds.

**Vision:** Requires the ability to perceive the nature of objects by the eye.

**Near Acuity:** Clarity of vision at 20 inches or less.

**Midrange:** Clarity of vision at distances of more than 20 inches and less than 20 feet.

**Far Acuity:** Clarity of vision at 20 feet or more.

**Peripheral:** Ability to observe an area that can be seen up and down or left and right while eyes are fixed on a given point.

**Depth Perception:** Three-dimensional vision. Ability to judge distances and spatial relationships so as to see objects where and as they actually are.

**Ability to adjust focus:** Ability to adjust the eye to bring an object into sharp focus.

**Speaking/Hearing:** Possesses the ability to give and receive information through speaking and listening skills.

**Motor Coordination:** While performing the duties of this job, the incumbent is regularly required to sit; use hands to finger, handle, or feel objects, tools, or controls; and reach with hands and arms. The incumbent is frequently required to stand; and walk. The incumbent is occasionally required to climb or balance; and stoop, kneel, crouch, or bend.

**COMPETENCIES:**

The following competencies describe the knowledge, skills, abilities, and attributes that lead to a successful employee in this position. An applicant will be expected to exhibit these competencies

or the ability to reach competency achievement within a specified time. These competencies are linked to the essential functions of the job. Employees in this position may be evaluated on these competencies as part of the performance appraisal system. Example behaviors are listed below each competency and are used for illustrative purposes only. Specific behaviors may be identified and included later by the hiring agency. It is understood that some of these behaviors might not be acquired until a reasonable time after hire. Failure of an employee to successfully demonstrate some or all of these competencies, as deemed important by his or her reporting official, may result in the employee being placed on a performance improvement plan. If after a reasonable period of time, usually three (3) months, the employee fails to demonstrate successful performance, the employee may be terminated. These competencies include, but are not limited to, the following:

**PUBLIC SECTOR COMPETENCIES:**

**Integrity:** Exhibits behaviors showing a strong internal personal commitment to fundamental principles of honesty and fairness dealing in all activities related to job performance.

**Work Ethic:** Is productive, diligent, conscientious, timely, and loyal.

**Service Orientation:** Demonstrates a commitment to quality public service through statements and actions.

**Accountability:** Accepts responsibility for actions and results.

**Self Management Skills:** Effectively manages emotions and impulses and maintains a positive attitude.

**Interpersonal Skills:** Shows understanding, courtesy, tact, empathy, and concern to develop and maintain relationships.

**Communication Skills:** Receives, attends to, interprets, and responds to verbal messages and expresses information to individuals or groups effectively.

**Self-Development:** Adapts behavior or work methods in response to new information, changing conditions, or unexpected obstacles.

**TECHNICAL COMPETENCIES:**

**Forensic science:** Is proficient in the application of forensic sciences in order to answer questions of interest to the legal system.

Is proficient in chemical, instrumental, and microscopic techniques necessary to perform the required examinations. Identifies unknown substances using various microscopic and analytical procedures.

**Technical Communication:** Effectively conveys usable information through writing or speech about a specific topic to an intended audience

Serve as an expert witness and present testimony in court. Concisely and correctly answers questions and/or explains or conveys information to the public, co-workers, and other entities. Presents oral and written information internally or externally using proper grammar, punctuation, and content. Communicates information in a courteous manner without invoking anger.

**Analytical Instrumentation:** Correctly uses and maintains instruments that are utilized in detecting, measuring, analyzing, and/or monitoring chemicals in liquids, solids, and/or gases.

Operates such instruments as mass selective detectors; gas and liquid chromatographs; compound light and stereoscopic microscopes; and ultraviolet and infrared spectrophotometers. Performs maintenance on analytical instruments and verifies calibration.

**Critical Thinking:** Uses logic and reasoning to identify, analyze, and evaluate the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

Gathers and assesses relevant information, using abstract ideas to interpret it effectively. Comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards.

**Case Management:** Performs a collaborative process of collection, investigation, and/or management of relevant analyses in order to report conclusions related to a criminal case.

Prepares reports documenting information. May examine crime scenes for evidence and collects items and materials for laboratory examination.

**Laboratory Science:** Possesses proficiency in the objective and systematic study of specimens and the testing and analysis of such specimens in a forensic laboratory.

Gives independent, scientific opinion and defends in court. Performs laboratory examinations. Performs qualitative and quantitative analyses.

**Report Writing:** Documents information obtained through analysis in a clear and legible manner.

Prepares detailed reports for court presentations. Submits reports in a timely manner free of mistakes.

**Training/Teaching Others:** Helps others learn through formal or informal methods; assists in identifying training needs; coaches others on how to perform tasks.

Assists in training new or less experienced analysts in the technical aspects of their position. Participates in forensic training to law enforcement officers.

**ESSENTIAL FUNCTIONS:**

**Additional essential functions may be identified and included by the hiring agency. The essential functions include, but are not limited to, the following:**

1. Collects, identifies, classifies, and analyzes physical evidence related to criminal investigations.
2. Operates and maintains analytical instruments in a laboratory setting.
3. Prepares detailed reports for court presentations and consults with members of the criminal justice community.

**EXAMPLES OF WORK:**

**Examples of work performed in this classification include, but are not limited to, the following:**

Consults with investigating officers, district attorneys and pathologists involved in cases.

May examine crime scenes for evidence and collect items and materials for laboratory examination.

Examines unknown materials for the presence of foreign substances.

Makes chemical and instrumental analyses for identification and comparison of items of physical evidence.

Identifies unknown samples using various microscopic and analytical procedures.

Operates such instruments as mass selective detectors; gas and liquid chromatographs; compound light and stereoscopic microscopes; and ultraviolet and infrared spectrophotometers.

Prepares detailed reports for court presentations.

Participates in forensic training for law enforcement officers.

Assists in training new or less experienced analysts in the technical aspects of their position.

Serves as an expert witness in court.

Performs maintenance on analytical instruments and verifies calibration.

Conducts comparisons of questioned material recovered from crime scenes, victims, and suspects.

Performs related or similar duties as required or assigned.

**INTERVIEW REQUIREMENTS:**

Any candidate who is called to an agency for an interview must notify the interviewing agency in writing of any reasonable accommodation needed prior to the date of the interview.