

## City of Fort Worth, Texas Job Description

<b>Classification Title</b>	Forensic Scientist IV		
<b>Job Code:</b>	PR3051	<b>Job Family:</b>	Professional
<b>Pay Grade</b>	611	<b>Date Reviewed:</b>	09/09/2019
<b>FLSA Status</b>	Exempt	<b>Date Revised:</b>	02/17/2020

### GENERAL SUMMARY

Under limited supervision, performs a variety of highly complex scientific laboratory analyses on physical evidence to provide scientific consultation; interprets highly complex test results and forms highly complex conclusions; writes scientific examination reports; testifies as an expert witness in court for highly complex legal cases; reviews and participates in highly complex and difficult work; assists supervisory staff in various assigned projects.

### ESSENTIAL DUTIES & RESPONSIBILITIES

*The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by scientists of this job. Scientists may be requested to perform job-related tasks other than those specifically presented in this description.*

1. Performs all essential duties and responsibilities and Unit-specific requirements of a Forensic Scientist III.
2. Maintains highly complex records of evidence sampling, analysis and examination.
3. Leads and successfully completes highly complex forensic projects assigned and approved by the Unit Supervisor and Forensic Science Division Manager that benefits either the Unit, Lab, or Department, prior to promotion to a Forensic Scientist IV.
4. Assumes Unit lead responsibilities in the absence of the Forensic Supervisor when assigned.
5. Adheres to work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.
6. Performs other duties as assigned.

#### **When assigned to the Biology Unit:**

1. Examines highly complex evidence for the presence of biological material.
2. Performs highly complex serological and DNA testing.
3. Performs technical reviews on mixture DNA cases.
4. Determines suitability for entry into CODIS and complies with the FBI Assurance Standards for Forensic DNA Testing Laboratories.

**When assigned to the Chemistry Unit:**

1. Performs highly complex qualitative analyses of controlled substances, pharmaceutical preparations, and plant materials utilizing highly complex highly complex analytical techniques such as gas chromatography, mass spectroscopy, and infrared spectroscopy.
2. Performs highly complex toxicological analysis for the determination of blood alcohol concentration using headspace analysis.

**When assigned to the Firearm and Toolmark Unit:**

1. Examines all types of highly complex firearms and firearms related evidence including highly complex firearm functionality testing, microscopic examination and comparison of ammunition components, such as bullets and cartridge cases, serial number restoration testing, non-firearm toolmark examinations and muzzle-to-target distance determination examinations.

**KNOWLEDGE, SKILLS & ABILITIES****• Knowledge of:**

- Theoretical and analytical principles of natural, physical and forensic sciences including organic, inorganic, chemistry, biology and/or other applicable fields and sub-disciplines.
- Complex mathematic principles and statistics.
- Laboratory testing procedures and methods.
- Standard laboratory procedures and safety precautions regarding chemicals, toxins and biological substances.
- Evidence collection, preservation, and documentation procedures.
- Principles and procedures used to offer expert testimony in court.
- Federal, State and local laws, codes and regulations pertaining to forensic science.
- Policies, procedures, rules and regulations governing a forensic laboratory.
- Operational methods and techniques of forensic laboratory equipment.
- Principles and procedures of record keeping.
- Principles of business letter writing and basic report preparation.
- Accreditation guidelines and the laboratory's quality management system.

**• Skill in:**

- Troubleshooting technical problems.
- Technical writing and editing.
- Microsoft Office.
- Computers and related software.
- Public speaking.

**• Ability to:**

- Communicate clearly and effectively, both orally and in writing.
- Perform a variety of scientific laboratory analyses on physical evidence to provide scientific consultation.

- Determine proper testing techniques for each item of evidence.
- Utilize biology, chemistry, physics and molecular biology theories.
- Perform chemical and physical analysis and macroscopic/microscopic examinations.
- Work extensively with chemical and biological hazards in a safe manner.
- Prepare detailed reports on laboratory test results and examinations.
- Testify in court as an expert witness.
- Follow and assist in the establishment of standard operating procedures.
- Analyze evidentiary data and form a defensible opinion or conclusion of observations.
- Establish and maintain effective working relationships.
- Work effectively as part of a team.
- Handle multiple tasks simultaneously.
- Follow health and safety guidelines.
- Make scientific observations, evaluate observations and reach reasoned scientific conclusion or opinions about those observations.
- Defend point of view, conclusions or opinions in a logical, professional, manner.
- Objectively review and solicit process improvements.

## **MINIMUM JOB REQUIREMENTS**

If assigned to the Chemistry or Firearm and Toolmark Units:

Bachelor's or advanced degree in chemical, physical, biological science, chemical engineering, or forensic science from an accredited university.

If assigned to the Biology Unit:

Bachelor's or advanced degree in a biology-, chemistry-, or forensic science-related area with successfully completed coursework (undergraduate or graduate level) in biochemistry, genetics, molecular biology, and statistics and/or population genetics. The scientist shall have a minimum of 9 semester hours (or the equivalent) that cover the subject areas of biochemistry, genetics, and molecular biology.

Must also meet additional specific coursework requirements as required by the Texas Forensic Science Commission, as well as the FBI Quality Assurance Standards if assigned to the Biology Unit and at least seven (7) years of highly complex independent discipline-specific casework experience as a qualified Forensic Scientist III (or equivalent).

## **OTHER REQUIREMENTS**

Ability to obtain a valid Texas driver's license within six (6) months from hire date.

Provide a buccal DNA sample after hire date.

Must obtain a Texas Forensic Analyst License within six (6) months from hire date.

Ability to comply with all Texas Forensic Science Commission requirements.

Appropriate forensic certification (as approved by the Forensic Science Division Manager).

## **WORKING CONDITIONS**

*The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, walking and repetitive motions. Works with hazardous materials and chemicals. May be exposed to hazardous and/or dangerous work environments.

## **PHYSICAL DEMANDS**

*The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Light Work - Depending on assignment, positions in this class typically exert up to 50 pounds of force occasionally, up to 20 pounds of force frequently, and/or up to 20 pounds of force constantly having to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for the Sedentary Work category and the worker sits most of the time, the job is rated Light Work.