Iowa Department of Administrative Services – Human Resources Enterprise Job Classification Description

# **Forensic Science Technician**

# Definition

Performs a variety of routine standardized tests and analyses in direct support of forensic laboratory and field examinations under close supervision; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

## Work Examples

Prepares reagents by predetermined procedures for use in routine tests.

Maintains inventory of chemicals and laboratory consumables through both ordering and receipt of items.

Prepares samples for analysis by sampling and labeling, including items consisting of urine, blood, and other biological fluids.

Performs screening tests on sampled items and documents results.

Processes submitted digital images into photographic prints and archives images.

Applies accepted forensic photographic techniques to record significant details in evidence, such as in the areas of crime scene and latent fingerprint processing.

Serves on the laboratory crime scene response team in collecting, documenting, and photographing potential items of evidence.

Develops latent prints and captures via photographic techniques for potential identification by a latent print examiner.

Assists in managing inventory of firearms set for destruction by safely handling of firearms and test firing as needed.

Provides initial examination and evaluation of biological evidence submitted to the laboratory for DNA analysis. Assists with extraction, quantitation, amplification, and electrophoresis of DNA samples.

Testifies in court regarding work performed.

Conducts temperature monitoring, decontamination, routine instrument maintenance, and other laboratory quality assurance monitoring functions.

Cares for and maintains evidence submitted by law enforcement agencies.

Operates analytical laboratory instrumentation under supervision of technical superior and assembles resulting data.

Performs sample accessioning, data entry, and conversion of paper files into electronically-formatted files in the DNA Unit of the laboratory.

Assists with laboratory quality assurance functions as directed by participating in audits and updating procedures.

#### **Competencies Required**

Knowledge:

- Laboratory processing The concept of scientific method, and standard analytical laboratory technique.
- English Language The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Chemistry The chemical composition, structure, and properties of substances and the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
- Biology Plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- Public Safety and Security Relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Computers and Electronics Electronic equipment, and computer hardware and software, including applications and programming.

Abilities:

- Flexibility of Closure Identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.
- Inductive Reasoning Combine pieces of information to form general rules or conclusions.
- Deductive Reasoning Apply general rules to specific problems to produce answers that make sense.
- Near Vision See details at close range (within a few feet of the observer).
- Speech Recognition Identify and understand the speech of another person.
- Oral Expression Communicate information and ideas in speaking so others will understand.
- Information Ordering Arrange things or actions in a certain order or pattern according to a specific rule or set of rules
- Problem Sensitivity Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Skills:

- Science Using scientific rules and methods to solve problems.
- Critical Thinking Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- Active Learning Understanding the implications of new information for both current and future problem-solving and decision-making.

- Operation Monitoring Watching gauges, dials, or other indicators to make sure a machine is working properly.
- Active Listening Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Judgment and Decision Making Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Reading Comprehension Understanding written sentences and paragraphs in work-related documents.
- Speaking Talking to others to convey information effectively.

## **Minimum Qualification Requirements**

Applicants must possess an associate's degree with an emphasis in laboratory technology, chemistry, biology, physics, or a related field to qualify for positions in this job classification.

# **Additional Qualification Requirements**

For select positions, applicants may be required to meet one or more of the additional qualification requirements listed below.

- A minimum of twelve semester hours of education, six months of full-time experience, or an equivalent combination of both in the following areas:
  - 072 photography
  - 108 DNA analysis
  - 005 crime scene
- A minimum of six months of full-time experience in the following areas:
  - 049 latent fingerprint development
  - 102 firearms

Applicants who wish to be considered for these select positions must describe on the application how each additional qualification requirement is met.

#### Notes

Applicants for this job class must be able to pass a thorough background investigation conducted by the Division of Criminal Investigation.

Travel, including overnight travel, may be required for positions in this class. Employees must arrange transportation to and from assigned work areas.

Effective date: <u>06/14 SA</u>