Program Purpose

The Biometric and Forensic Intelligence training program is designed to provide participants with the knowledge, skills, and abilities to manage the forensic analysis of evidence (collected exploitable materials) to enhance information capabilities and awareness across the range of law enforcement and/or military operations (tactical, intelligence, prosecution).

Delivery and Evaluation Method

- Online pre-assessments
- Performance Measurements (minimum grade requirement: 80%)
- Online post-assessments (minimum grade requirement: 80%)
- Final culmination exercise
- Online final exam (minimum grade requirement: 80%)

Key Program Features

- Structured in a modular format, allowing for greater flexibility and customization to meet unique audience needs and desired learning outcomes.
- Delivered by highly experienced and knowledgeable subject matter experts who possess a wealth of knowledge and practical experience in their respective fields.
- Designed to provide 120 hours of comprehensive education that encompasses various learning methods. The instruction includes lectures, interactive discussions, and practical hands-on exercises to provide participants a well-rounded learning experience. These three approaches cater to different learning styles and reinforce key concepts.

Program Content Outline

Lesson Title	Hours	Learning Objectives
Introduction		▪ Describe course purpose ▪ Identify course instruction methods, participant requirements and expectations ▪ Summarize course subject matter
Biologics		▪ List sources of DNA ▪ Identify biological material most likely to yield a DNA profile ▪ Explain protocols used to mitigate the contamination of biological material ▪ Explain the process used to clean preparation areas when processing biological evidence ▪ Describe the method used to collect a buccal swab sample ▪ Describe methods used to identify, collect and package biological material ▪ Describe methods used to presumptively identify material at the scene ▪ Explain the environmental effects on biological material ▪ Define key DNA-related terms ▪ Describe possible DNA analysis outcomes ▪ Describe different types of DNA testing ▪ Locate biological stains using an alternate light source and goggles ▪ Examine evidence for biological materials, collect appropriate samples and package evidence for submission to the library

Site Exploitation/Scene Investigation	▪ Explain steps used to conduct a site exploitation or scene investigation ▪ List and describe scene investigation documentation requirements ▪ Recognize common causes of evidence contamination ▪ Explain the significance of chain of custody ▪ Explain basic evidence collection techniques ▪ Summarize evidence preservation, packaging, and labeling techniques ▪ Apply general safety protocols and techniques in a field or laboratory environment ▪ Demonstrate the ability to recognize, document, collect, preserve, and transmit physical evidence for analysis according to recommended guidelines
Digital Photography in the Field and Lab	▪ Explain the importance of crime scene photography in overall documentation of a scene ▪ Explain the term “fair and accurate” as it relates to crime scene photography ▪ Describe basic camera techniques and functionality used to obtain quality photographs in a normal setting ▪ Describe basic and advanced camera techniques and functionality used to enhance the quality of a photograph taken in a variety of settings ▪ Describe basic lighting strategies applied to photography ▪ Photograph item of interest with proper lighting, exposure settings, and scale placement for evidence documentation ▪ Capture image of an item of evidence appropriate for comparison analysis using laptop-based software controls, D-SLR camera and copy stand
Latent Print Processing	▪ Describe characteristics and composition of friction ridges ▪ Describe how to make invisible prints visible ▪ Apply techniques used to recover fingerprints from a variety of surfaces in a field or laboratory environment

Impression Evidence	▪ Describe how tool markings and impressions are formed ▪ Define class, subclass and individual characteristics ▪ Explain how striated and impressed individual characteristics are produced ▪ Identify types of toolmarks and impression markings ▪ Describe methods used to properly collect, package and submit toolmark and impression evidence
Digital Forensics Overview	▪ Describe the purpose of digital forensics ▪ Identify sub-disciplines associated with digital forensics ▪ Define the term DOMEX ▪ List types of digital forensics ▪ Explain sources of data examined during a digital forensics investigation
Computer Forensics	▪ Define the terms computer forensics and MEDEX ▪ Explain key principles associated with computer forensics ▪ Identify software and equipment used to support computer forensic investigations ▪ Describe the purpose of forensic imaging ▪ Discuss tools used to perform forensic imaging ▪ Recognize the importance of forensic imaging as it relates to computer forensics ▪ Identify, preserve, extract, analyze and report forensic evidence located on digital devices using the appropriate forensic tools
Mobile Forensics	▪ Define the term mobile forensics ▪ Explain key principles associated with the mobile forensics process ▪ Conduct extraction, analysis and reporting using mobile forensics tool kits

Forensic Chemical Analysis	▪ Define trace and bulk chemical materials ▪ Explain how trace material can be transferred ▪ Describe types of bulk material, such as accelerants, common chemicals, explosives precursors and other compounds ▪ List basic rules of safe chemical material collection ▪ List the most commonly encountered drugs of abuse ▪ Describe various precursors and common ingredients used to manufacture drugs ▪ Describe safe handling, collection and storage concerns related to homemade explosives ▪ Describe chemical precursors and necessary equipment used in homemade explosive manufacturing ▪ Conduct presumptive and confirmatory testing of known and unknown trace materials using appropriate tools, techniques and processes
Final culmination exercise	▪ Perform receipt documentation verification ▪ Conduct item receipt photography ▪ Triage items ▪ Develop investigation/exploitation plan ▪ Use appropriate procedures to exploit various items submitted ▪ Export results from various mediums for upload ▪ Produce exploitation report