



## Curriculum Outline

**Course Title:** *Crime Scene Course*

**Course Description:**

*The study of responding to a homicide scene, documenting the investigation, documentation, collection and preservation of evidence is the emphasis of this course. Classroom instruction will be lecture style using PowerPoint presentations. Hands-on training will be conducted in an indoor or outdoor field environment. Students will be provided with a Crime Scene Course CD. Dress for inclement weather is required.*

**Number of instructional hours:** *21.5 contact hours*

**Number of lecture hours:** *11*

**Number of hands-on training hours:** *10.5*

**Submitted by:** *Sgt. Miguel Santiago and Det. Terry Brandon*

**Course Objectives Classroom Training:**

- **Documenting a Homicide Investigation:** Learn the basics of documenting, taking notes, the use of detective's field notes, documenting the scene, documenting the victim, witnesses, suspects, documenting interviews and interrogations, documenting weapons, analyzing and organizing notes, debriefing, writing the report, resources for the report, and report review.
- **Crime Scene Sketches and Diagrams:** Learn about and complete sketches, the use of sketches, legal aspects, preparing the sketch, required information, types of drawing, and measurement techniques.
- **Photographing the scene:** Learn about the admissibility of photographs, crime scene photographs, point of view, recommended shots, overall, medium and close ranger photos, utilizing scales, letters and numbers.
- **Collection and Preservation of Evidence:** Learn of the three things that make a strong case, theory of exchange, evidence, physical evidence, location of physical evidence, guidelines to follow, types of evidence, documenting the scene, and collection and storage of evidence.
- **Footwear and Tire Track Impressions:** Learn awareness, detection and treatment of footwear impressions, photography of footwear impressions, casting 3D impressions, casting procedures, soil conditions, snow and ice, marking and packaging, treatment of 2D impressions, chemical enhancement of impressions, tire track impressions,

impressions and tracks, types of tires, design elements, tire track evidence, recovery of tire evidence, analysis of evidence, and references.

- **Bloodstain Pattern Analysis:** Learn that blood patterns are predictable, the function of bloodstain analysis, interpret bloodstain evidence, 3 styles of bloodstains, 3 velocities of blood spatter, importance of bloodstain evidence, directionality, 6 basic event types, presumptive tests, and blood enhancement chemicals.
- **Human Skeletal Remains “Recovering and Identifying the Victim”:** Learn about buried body cases, where to locate forensic scientists, searching for burial site, considerations, identified burial site, investigation, photography, photograph the grave site, crime scene investigation, site sketch, the body, removing and packaging remains, methods of identification, and NamUs missing person database.
- **Wounds and Pattern Injuries:** Learn about bullets and shells, shot shell wadding, homicide vs. suicide, mechanism of shooting, types of gunshot wounds, abrasion collar, abrasion margin, smudging and smoke, stippling, contact wounds, ricochet wounds, shotgun distance range, intermediate range, contact range, cutting wounds, stabbing wounds, defensive wounds, blunt force injuries, lacerations, and chopping wounds.
- **Officer Involved Shooting Investigation:** Learn about due diligence, officer involved shooting, dual investigation, separate detectives, media, focus of the investigation, photographs, shooting scene, hospital scene, shooting investigation, common bullets, shot pattern testing, function testing, gunshot residue, shooting reconstruction equipment, trajectory rods, trajectory string kit, horizontal and vertical angle measurements, and trajectory laser pointers. Course Objectives

#### **Hands-On Training:**

- **Station #1 – Shoe and Tire Track Impressions** – Document, photograph, process, cast and collect shoe and tire track impressions
- **Station #2 – Documentation and Bloodstain Pattern Analysis** – Document, photograph, and process a bloody wall
- **Station #3 – Human Skeletal Remains Recovery**– Document, photograph, process, dig and recover skeletal remains
- **Station #4 – Wound and Pattern Injuries** – Document, photograph, and process wounds and injuries
- **Station #5 – Shooting Reconstruction** – Document, photograph, and process a shooting scene • **Case Study:** Review a real-life homicide case to identify the investigative techniques learned during these courses that were utilized during the investigation.