



Curriculum Outline

Course Title: *Wound and Pattern Injuries*

Course Description:

The study of investigating, interpreting and processing wounds and pattern injuries. 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 a Wounds and Pattern Injuries Course CD. Dress for inclement weather is required.

Number of instructional hours: 24

Number of lecture hours: 8

Number of hands-on training hours: 16

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

Course Objectives Classroom Training:

GUNSHOT WOUNDS – Learn about bullets and shells, homicide vs. suicide, mechanism of shooting, two types of GSW, abrasion collar, smudging and smoke, tattooing or stippling, contact wounds, distance determination, ricochet wounds, shotgun, distant, intermediate and contact ranges.

KNIFE WOUNDS – Learn about knife wound categories, characteristics of cutting wounds, stabbing wounds, and defensive wounds.

BLUNT FORCE TRAUMA WOUNDS – Learn about the appearance of blunt force injuries, lacerations, and chopping wounds.

VEHICLE CRASH WOUNDS AND INJUIRES – Learn about the life threatening injuries from car accidents, head injuries, neck injuries, penetrating chest injuries, penetrating abdominal injuries, fractured skulls, ribs and extremities, and major joint dislocations.

ELECTRUCUTION WOUNDS AND INJURIES – Learn how electricity damages skin and internal organs, and the 3 ways electricity can cause injury and or death.

HANGING WOUNDS AND INJURIES – Learn the definition of a hanging, obstructed blood flow, furrows, suspension points, abrasion and contusions.

STRANGULATION WOUNDS AND INJURIES – Learn the definition of strangulation, two types of strangulations, ligature and its common signs.

TRAUMATIC CRUSH WOUNDS AND INJUIRES – Learn how it is caused, external signs on the body, mechanism of injuries, crush injuries, external and internal forces.

THERMAL WOUNDS AND INJURIES – Learn the definition of a thermal burn, classifications of thermal burns, and the three common types of thermal burns.

CHEMICAL WOUNDS AND INJURIES – Learn the definition of a chemical burn, the main types of irritants, how chemical burns vary, symptoms, causes, and how they occur.

BITE MARK WOUNDS AND INJURIES – Learn about the types of cases associated with bite marks, how bite marks can link a suspect to a victim, preserving bite marks, and forensic odontologists.

DOG ATTACK WOUNDS AND INJURIES – Learn about puncture and tearing wounds, crushing injuries, internal tissue damage, most common targets of dog attacks, and physical injuries and scars.

WORK PLACE WOUNDS AND INJURIES – Learn the definition of occupational injuries. Become familiar with the most common organs injured on the job. Learn to process a job-related death and work with outside agencies to document the work place conditions and environment. Learn the hazards found at the workplace.

Course Objectives Hands-On Training:

- **Station #1** – Gunshot Wounds
- **Station #2** – Bite Marks
- **Station #3** – Stab Wounds
- **Station #4** – Blunt Force Trauma
- **Station #5** – Ligature Marks
- **Case Study:** *Review a real-life homicide case to identify the investigative techniques learned during these courses that were utilized during the investigation.*