

Basic Crime Scene Investigation Course Syllabus (40 Hours)

Course Target Audience

Crime scene investigators, death investigators, officers and detectives with beginner to intermediate skills in camera use and crime scene processing.

Course Objectives

Establish understanding in the forensic principles of crime scene processing.

Establish understanding and skills in the identification, documentation, preservation and collection of the most common types of crime scene evidence.

Required Equipment

Camera and camera related equipment Flash light

Sturdy clothes and footwear

*Students are encouraged to bring as much evidence processing equipment from their kits as possible. However, equipment is provided, when needed.

Course Schedule

DAY ONE. (8 hours)

Module 1 – Ethics & the Role of the Crime Scene Investigator

- Role of the crime scene investigator
- Responsibilities, before, during and after the crime scene.
- Proper documentation
- High profile cases

Module 2 – Overview of Crime Laboratory Capabilities & Limitations

- Latent Prints/Impression Evidence
- Serology/DNA
- Controlled Substances
- Toxicology
- Firearms/Toolmarks
- Trace Evidence
- Questioned Documents

Module 3 – Crime Scene Management Methods & Crime Scene Equipment

- Initial response and arrival
- Scene security/integrity
- Briefing
- Processing steps and timelines
- Crime scene equipment

Practical Exercise 1 – Briefing notetaking exercise

Practical Exercises 2 – "Game plan" exercise

Day one written quiz

DAY TWO. (8 hours)

Module 4 – Basic Crime Scene Photography

- Photography equipment
- Exposure
- Proper focus & focus settings
- Camera settings
- Adjusting shutter speed, f-stop & ISO
- Crime scene photograph composition & sequence
- Specialty photography techniques

Practical Exercise 3 – Making camera adjustments

Practical Exercise 4 – Overall, mid-range and close up photos

Module 5 – Crime Scene Sketching, Measurements & Notetaking

- Minimum sketch requirements
- Bird's eye view sketch
- Exploded sketch
- Vertical surface sketch
- Measurement requirements
- Measurement equipment & documentation methods
- Baseline measurements
- Triangulation measurements
- Polar coordinates measurements
- Review of Total Station and 3D scanning

Practical Exercise 5 – Sketching the crime scene

Practical Exercise 6 – Using baseline to measure the scene

Practical Exercise 7 – Using triangulation to measure the scene

Practical Exercise 8 – Using polar coordinates to measure the scene

Day two written quiz

DAY THREE. (8 hours)

Module 6 – Latent Print Processing at the Crime Scene

- Principles of Latent Prints
- Searching for Latent Prints at the Scene
- Magna-powder/black powder methods for collection
- Small Particle Reagent
- Proper documentation of latent prints
- Collecting ten-print & major case prints

Practical Exercise 9 – Searching for visible prints

Practical Exercise 10 - Processing with Magna Powder, Black Powder & SPR

Module 7 – Biological Evidence at the Crime Scene

- Sources of DNA
- Contamination considerations & PPE
- Searching for biological evidence
- Collection equipment
- Presumptive tests
- Collection techniques
- Documenting biological evidence
- Sample packaging/storage

Practical Exercise 11 – Kastle-Meyer presumptive test

Practical Exercise 12 – Collection of "touch DNA"

Practical Exercise 13 – Blood collection

Day three written quiz

DAY FOUR. (8 hours)

Module 8 – Footwear/Tire Track Evidence at the Crime Scene

- Sources of footwear/tire track evidence
- 3D vs. 2D impressions
- Evidence substrates
- Casting 3D impressions
- Electrostatic Dust Lifter (ESLD)
- Gel Lifters
- Documenting footwear/tire track evidence
- Packaging and storage of evidence

Practical Exercise 14 – Casting of footwear/tire track evidence

Practical Exercise 15 – Processing using ESDL & gel lifters

Module 9 - Firearms Evidence at the Crime Scene

- Firearms safety
- Common terms
- "Anatomy" of firearms
- Shooting scene considerations
- Documenting firearms
- Firearms evidence collection

Practical Exercise 16 – Firearms evidence documentation

Day four written quiz

DAY FIVE. (8 hours)

Module 10 - Trace Evidence at the Crime Scene

- Types of trace evidence
- Common terms
- Evidence Loss considerations
- Collection & packaging of trace evidence

Practical Exercise 17 – Collection and documentation of trace evidence

Module 11 – Digital Evidence at the Crime Scene

- Types of digital evidence
- Common terms
- Preserving data
- Documenting digital evidence
- Collection & packaging of digital evidence

Practical Exercise 18 – Collection and documentation of digital evidence

Final Exercise 1 – Outdoor vehicle mock scene

Final Exercise 2 – Indoor mock scene

Final cumulative test

Certificate ceremony

*Quizzes and tests are used for student's self-assessments only. Grades are not recorded by instructor.