



FORZA FORENSICS
Passion. Experience. Diligence.

Advanced Crime Scene Investigation Course Syllabus (40 Hours)

Course Target Audience

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

Course Objectives

Increase understanding and competency in advanced crime scene processing techniques.

Increase understanding and competency in documenting complex types of evidence and processing techniques.

Increase competency in providing crime scene processing related reports and court testimony.

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 – Review of CSI Roles and Crime Scene Processing Methodology

- Role of the crime scene investigator
- Responsibilities, before, during and after the crime scene.
- Review of proper documentation
- High profile case review
- Review of crime scene processing methodology

Module 2 – Bloodstain Pattern Recognition & Documentation*

- Review of peer reviewed guideline and publications
- Relevant caselaw
- The composition of human blood
- Basics of fluid dynamics
- Basic characteristics of bloodstain patterns
- Searching for bloodstain patterns
- Bloodstain pattern “Road Mapping”
- Relevant bloodstain pattern publications & case studies

Practical Exercise 1 – Angle of impact exercise

Practical Exercise 2 – Recreating common bloodstain patterns

Practical Exercise 3 – Bloodstain pattern “Road Mapping”

Review of student photographs and documentation

Day one quiz

**This section teaches proper recognition and documentation of bloodstain pattern evidence used for subsequent analysis. It does not qualify the student to produce a report or give testimony interpreting bloodstain patterns.*

DAY TWO. (8 Hours)

Module 3 – Bloodstain Pattern Enhancement with Amido Black and LCV

- Review of peer reviewed guidelines and publications
- Chemistry of enhancements (Amido Black & LCV)
- Enhancing impressions made in blood
- Proper application of chemical enhancements
- Sequential documentation of chemical enhancements

Practical Exercise 4 – Application & documentation of Amido Black

Practical Exercises 5 – Application & documentation of Leuco Crystal Violet (LCV)

Review of student photographs and documentation

Module 4 – Latent Bloodstain Pattern Enhancement with Chemiluminescent Reagent (Bluestar)

- Review of peer reviewed guidelines and publications
- Chemistry of chemiluminescent blood reagents
- Proper application of chemical enhancements
- Sequential documentation of chemical enhancements

Practical Exercise 6 – Application of chemiluminescent reagent

Practical Exercise 7 – Photographing chemiluminescence enhancement

Review of student photographs and documentation

Day two quiz

DAY THREE (8 hours)

Module 4 – Firearms and Projectiles as Evidence

- Firearm “anatomy”
- Safety at the crime scene
- Basics of terminal ballistics
- Sodium Rhodizonate presumptive test for lead

Practical Exercise 8 – Application of Sodium Rhodizonate

Module 5 – Documenting a Shooting Incident Scene*

- Firearms documentation equipment
- Shooting scene/firearms evidence documentation
- Photographing a shooting scene
- Photographing trajectory rods
- Photographing trajectory LASERs

Practical Exercise 9 – Mock shooting scene

Practical Exercise 10 – Documenting trajectory rods and related measurements

Practical Exercise 11 – Photographing trajectory LASERs

Review of student photographs and documentation

Day three quiz

**This section teaches proper recognition and documentation of shooting incident evidence used for subsequent analysis. It does not qualify the student to produce a report or give testimony interpreting the physics of ballistic evidence or events.*

DAY FOUR. (8 hours) (late start)

Module 6 – Advanced Photography Techniques

- Comparison quality photography
- Long exposure and painting with light
- Flash photography techniques

Practical Exercise 12 – Comparison quality photographs

Practical Exercise 13 – Long exposure

Practical Exercise 14 – Painting with light

Practical Exercise 15 – Flash photography

Module 7 – UV/IR Photography

- Review of the electromagnetic spectrum
- Physics of UV/IR Photography
- Equipment considerations and camera setup
- Crime scene use of UV/IR photography
- Photographing evidence with UV/IR photography

Practical Exercise 16 – UV photography of evidence

Practical Exercise 17 – IR photography of evidence

Review of student photographs and documentation

Day four written quiz

DAY FIVE. (8 hours)

Module 8 – Report Writing for Crime Scene Investigators

- Proper documentation at the crime scene
- Suggested report structure
- Use of photos and diagrams
- Common phrases
- Avoiding misleading statements

Practical Exercise 18 – Mock scene and report writing practice

Module 9 – Testimony for Crime Scene Investigators

- Court process and procedures
- Court attire and presentation
- Voir dire and qualifications
- Eye contact and demeanor
- Expert testimony
- Common pitfalls
- Presenting information to the court

Practical Exercise 19 – Personal qualifications

Practical Exercise 20 – Mock court exercise using report from Module 8

Final written quiz

Certificate ceremony

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