

**Forensics in the Classroom
Crime Scene Processes & Field Skills- Phase II**

Daily Schedule: 8 hours/day

Day 1: DSLR Photography – mini review

- Aperture, Shutter Speed, ISO
- Progression Photographs

Advanced Photography

- Low Light
- Macro
- ALS (alternate light source)

Cyanoacrylate Ester (CA)

- Pre-treatment Process
- Application

Day 2: Fluorescent Powder Processing

- Processing Technique
- Photography

Difficult Substrates: Collection Methods

- Gel Glue
- Diff Lift
- Mikrosil
- Poly Tape

Adhesive Tape

- Collection
- Packaging
- Safety & Chemical Processing

Day 3: Crime Scene Development and Evaluation

- Objectives-based Mock Scene Development
- Rubrics as Evaluation Tools
- Processing and Evaluation of Mock Scenes

Day 1

Time: 8 hours

TEKS Alignment: Forensic Science, §130.339(c)(6) The student recognizes the procedures of evidence collection while maintaining the integrity of a crime scene.
(c)(8) The student analyzes impression evidence in forensic science.

Learning objectives / Purpose:

(c)(6)(H) Demonstrate proper techniques for collecting, packaging, and preserving physical evidence found at a crime scene

(c)(8)(D) Perform laboratory procedures for lifting latent prints on porous and non-porous objects using chemicals such as iodine, ninhydrin, silver nitrate, and cyanoacrylate resin

Overview of the Activities:

Participant will perform hands-on activities that will include the following:

- Taking non-fluorescent and fluorescent macro photographs
- Taking low light photographs
- Pre-treating substrates with cyanoacrylate ester (superglue)

Participants will practice taking macro photographs of non-fluorescent and fluorescent fingerprints. They will use various photographic techniques to capture images in low light conditions. Participants will use fume tanks to pre-treat substrates with cyanoacrylate ester (superglue).

Day 2

Time: 8 hours

TEKS Alignment: Forensic Science, §130.339(c)(8) The student analyzes impression evidence in forensic science. (c)(2) The student, for at least 40% of instructional time, conducts lab and/or field investigations using safe, environmentally appropriate, and ethical practices. (c)(6) The student recognizes the procedures of evidence collection while maintaining the integrity of a crime scene.

Learning objectives / Purpose:

(c)(8)(E) Perform laboratory procedures for lifting latent prints on nonporous objects using fingerprint powders such as black powder and florescent powders;

(c)(2)(A) Demonstrate safe practices during laboratory and field investigations

(c)(6)(H) Demonstrate proper techniques for collecting, packaging, and preserving evidence found at a crime scene

Overview of the Activities:

Participants will perform hands-on activities that will include the following:

- Developing fingerprints with fluorescent powder
- Developing fingerprints on difficult substrates
- Developing fingerprints on adhesive substrates

Participants will develop fingerprints with fluorescent powder. Fingerprints will also be developed on difficult substrates, and various methods will be used for collection. Participants will develop fingerprints on adhesive substrates by chemical means.

Day 3

Time: 8 hours

TEKS Alignment: Forensic Science, §130.339(c)(3) The student uses scientific methods and equipment during laboratory and field investigations. (c)(5) The student explores the history, legal aspects, and career options within forensic science. (c)(6) The student recognizes the procedure of evidence collection while maintaining the integrity of the crime scene

Learning objectives / Purpose:

(c)(3)(E) Plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypothesis, and selecting equipment and technology

(c)(3)(C) Draw inferences based on data related to criminal investigations

(c)(5)(E) Explore and demonstrate an understanding of the terminology and the procedures employed in the criminal justice system

(c)(6)(B) Demonstrate the ability to work as a member of a team

(c)(6)(C) Conduct a systematic search of a simulated crime scene for physical evidence following crime scene search patterns such as spiral, line, grid, and strip

(c)(6)(H) Demonstrate proper techniques for collecting, packaging, and preserving physical evidence found at a crime scene

Overview of the Activities:

Participants will perform hands-on activities that will include the following:

- Developing objectives-based mock crime scenes
- Creating rubrics as mock scene evaluation tools
- Creating and evaluating mock crime scenes

Participants will develop objectives-based mock crime scenes. Participants will create rubrics as evaluation tools for mock crime scene investigation assignments. Participants will create mock crime scenes and use rubrics for evaluation.