



Crime Scene
Crime Scene Unit Field Training Manual
Crime Scene/Digital and Multimedia Division



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INTRODUCTION

The purpose of this manual is to provide newly appointed Crime Scene staff with a clear understanding of the expectations regarding standards of performance, conduct, discipline, and general administration during the Crime Scene Unit (CSU) Training Program. Personnel are required to comply with HFSC policy, company rules, CSU Standard Operating Procedures, and directives from supervisory and training personnel.

Staff members are an important and integral part of the Houston Forensic Science Center and the City of Houston. The on and off-duty conduct and job performance of employees will be subject to continuous evaluation by fellow employees, other criminal justice personnel, and the public. Beginning with basic training, the employees' behavior is considered a direct reflection of the Crime Scene Unit and the Houston Forensic Science Center.

SCOPE AND PURPOSE

The Houston Forensic Science Center (HFSC) CSU training program has five primary objectives:

1. Produce a highly trained and positively motivated Crime Scene Investigators (CSI) capable of meeting or exceeding standards of performance required by HFSC.
2. To provide leadership by training examples; to mold and build character; and to equip the CSI with the necessary tools and skills to ensure the highest quality professional services.
3. Provide equal and standardized training to all newly hired CSI and to provide remedial training in those areas where deficiencies are identified.
4. To act as a screening tool for applicants not suited for CSU.
5. Increase the overall efficiency and effectiveness of CSU by enhancing the climate of professionalism, competency, and ethical standards.

This training guide defines minimum training subject areas and critical tasks required for crime scene investigation. The program is designed to train CSI to be capable of providing support for forensic investigations. The trainee will learn to properly identify, collect, and preserve physical evidence found at crime scenes using standard techniques and best practices. The employee will also learn to operate applicable forensic equipment and the overall duties of CSI.

New employees are expected to review this guide and become familiar with its contents. CSI trainees are provided both verbal and written feedback of their performance.

CSI trainees are expected to demonstrate understanding of the general aspects of crime scene investigation skills throughout the training program. Essential processing skills are evaluated through a documented competency testing program.

Field training is designed to provide a consistent and standardized training, while ensuring the trainee possesses the skills required of a competent CSI. The program also offers the opportunity to work with different trainers and be exposed to varied techniques and practices while operating within



standardized guidelines. Through this method, the trainee is exposed to various working conditions that CSI must face. It is necessary to learn whether or not new CSIs can physically and mentally adjust to working varied hours and differing activity loads.

The training program for newly hired CSIs with no prior experience shall consist of classroom training, followed by field training, which consists of supervised casework. This manual outlines topics covered in both the classroom and field training.

Experienced CSIs may be exempt from classroom training and reading exercises, but will be required to complete supervised casework and competency tests in skills and techniques listed in this manual that are not encountered during field training casework.

During the training program, the trainee should be assigned to no fewer than two (2) trainers. This will expose the trainee to different techniques and styles of scene processing, while operating within the policies and procedures set forth in the CSU SOPs, as well as accepted best practice.

COMPLETION OF THE TRAINING PROGRAM

Upon completion of all of the modules and any required competency tests, the trainee shall be evaluated on a minimum of two scenes by a supervisor or their designee. The evaluation checklist shall be completed. Upon successful completion of the evaluation phase, the trainee shall be authorized for unsupervised casework.

DUTIES AND RESPONSIBILITIES OF CSU TRAINING PERSONNEL

RESPONSIBILITIES OF THE CSU SUPERVISORS

1. Implement and administer the Field Training Program.
2. Develop and update programs and policies as necessary to maintain a modern, efficient and effective program.
3. Assign trainees to trainers and ensure each trainee receives the proper equipment and manuals.
4. Review documentation on the trainee prepared by the trainer.

RESPONSIBILITIES OF THE TRAINER

The trainer is a designated CSI within the CSU who provides instruction to a trainee. Direct supervision, training, and evaluation of the assigned CSI are important roles and must be taken seriously.

The trainer will:

1. Ensure that the trainee is properly instructed in all policies and procedures of the CSU.
2. Clearly communicate expectations of the trainee in areas including, but not limited to: communication, documentation and performance.
3. Impart a positive attitude to the trainee regarding rules, policies, procedures, and goals of the CSU and HFSC.
4. Maintain a professional relationship during the entire training program. This includes when the trainee is assigned to another trainer. Trainers are encouraged to act as mentors to the trainees.



5. Refrain from making negative comments and gossip regarding other CSU personnel and other company employees while in the trainee's presence.
6. Intervene in the trainee's actions, as required, to avoid situations, such as:
 - a. Imminent physical danger.
 - b. Avoiding embarrassment to the trainer, company, or the City of Houston.
 - c. Immoral, illegal, or unethical conduct.
 - d. Compromising the effective operation of the company or its goals, objectives, or policies.
7. Serving in the capacity of a teacher and evaluator. Trainers are expected to frequently quiz trainees to ensure that the trainee understands the material given to them. Quizzes may be verbal or written and will be documented in the weekly report.
8. Ensuring trainees are in a constant learning environment. During down time, or when the trainer needs time to complete paperwork or other assigned duties, trainees are expected to be working on tasks.
 - a. These tasks can be self-initiated or assigned by the trainer.
 - b. Tasks should have set time limits to demonstrate that the trainee can utilize good time management skills.
 - c. Trainers are encouraged to provide mock scenes and other tasks to help build a trainee's skills and confidence. Trainers may develop their own tasks and are encouraged to share these with other trainers.
 - d. Tasks should help the trainee accomplish the following:
 - Developing time management skills
 - Developing confidence in their crime scene processing and photography skills
 - Understanding they are part of a team environment
 - Developing good documentation and orientation skills
 - Taking accountability and responsibility for their actions
9. Observing the trainee's performance and rate that performance in an objective manner using standardized evaluation guidelines. In doing so, any deficiency that a trainee has should be detected by the trainer. Evaluations must be sincere and given in a clear and straightforward manner emphasizing the positive and negative aspects of performance. Evaluations should reflect technical skills as well as thought processes, judgment and decision-making.

In order to provide timely feedback to the trainee, observation reports are completed at the end of each work week or as designated by the CSU Supervisor. It is critical that trainees receive timely feedback in areas of good performance and in areas needing improvement, so that they can make any needed adjustments.

The trainee will review and sign each weekly report. Copies of these reports will also be provided to the trainee. This allows the trainee to view his/her progress and make efforts to improve where needed, and to provide an overall evaluation of field performance and development. The trainer will keep a



record of the trainee's progress to include written reports, observation notes, and any other documentation that supports the efforts of the trainee.

The trainer will ensure that the CSI Field Training Checklist is followed and filled out accurately to depict the trainee's progress. The trainer will keep the CSU Supervisor informed of the trainee's progress. If a pattern of deficiencies with the trainee's performance is noted, the trainer shall inform the CSU Supervisor and work together to develop a plan to remediate the deficiencies. The trainer shall ensure the deficiencies are fully documented. If the trainee is not responding to training and deficiencies are not corrected, the trainer, CSU Supervisor and CSU Director will determine a course of action to be taken. This could include an extension of probation or termination.

Trainee information shall be kept confidential. Trainers shall discuss a trainee's performance, deficiencies, or other personnel topics only with other trainers, CSU Supervisors, and the CSU Director. Discussions may be held with other discipline supervisors or managers on a need-to-know basis and should be limited in scope to a particular scene or issue.

RESPONSIBILITIES OF THE TRAINEE

The trainee will

1. Follow the directives of their trainer and other CSU Supervisors and personnel when assigned. It is the responsibility of the trainee to learn company rules and regulations and CSU SOPs. The trainee is expected to follow these procedures at all times.
2. Take an active part in the training program by showing initiative and eagerness to learn. Trainees who are having difficulty with a trainer or the program shall address the issues through the chain of command.
3. Know that their training performance and/or other personnel matters are kept confidential by the trainers and CSU Supervisors.

Trainees are encouraged to keep a daily log, outlining their activities for the day, what areas they felt they performed well, and how they can improve. The purpose of the daily log is for self-assessment/self-evaluation. When completed honestly, it provides valuable information for the trainer to help ensure that the trainee learned what was intended.

The trainee may discuss their training with their trainer, a CSU Supervisor or CSU Director at any time.



1. Introduction to the Houston Forensic Science Center

1.1. Learning Objectives

- 1.1.1. To familiarize the trainee with the mission and operations of HFSC, CSU, and the Quality Division.
- 1.1.2. To introduce the trainee to unit policies and procedures, orientation of the unit operations and familiarization with the training program.

1.2. Training Outline

- 1.2.1. HFSC procedures and forms
 - 1.2.1.1. Qualtrax
 - 1.2.1.2. HFSC Intranet
- 1.2.2. CSU procedures and forms
- 1.2.3. Quality
 - 1.2.3.1. Accreditation
 - 1.2.3.2. Types of reviews
 - 1.2.3.3. Incidents, Corrective actions, Preventive Actions
 - 1.2.3.4. Proficiency/competency tests
 - 1.2.3.5. Qualtrax
- 1.2.4. Administrative procedures
 - 1.2.4.1. Calling in sick or late
 - 1.2.4.2. Clocking in and out
 - 1.2.4.3. Care and maintenance of equipment
 - 1.2.4.4. Vehicle fuel stations
 - 1.2.4.5. Location of Property
 - 1.2.4.6. Location of NOCC



2. Photography

2.1. Learning Objectives

- 2.1.1. To utilize camera equipment to document crimes scene and accurately represent scenes and evidence through photography and video recording.

2.2. Training Outline

- 2.2.1. Crime Scene Photography
 - 2.2.1.1. Composition and sequence of photographs (overall, mid-range, close-up)
 - 2.2.1.2. Comparative Photography
 - 2.2.1.2.1. Footwear
 - 2.2.1.2.2. Fingerprints/palm prints/foot prints
 - 2.2.1.2.3. Tire tracks
 - 2.2.1.2.4. Toolmarks
 - 2.2.1.2.5. Tripod setup, camera settings, lighting scale compass or north arrow
- 2.2.2. Specialized Photography
 - 2.2.2.1. Long exposure photography
 - 2.2.2.2. Night time/ambient light
 - 2.2.2.3. Forensic Light Source
 - 2.2.2.4. Macro photography
 - 2.2.2.4.1. Fingerprints
 - 2.2.2.4.2. VIN/Serial numbers
 - 2.2.2.5. Subject photography
 - 2.2.2.5.1. Overalls of all four sides
 - 2.2.2.5.2. Injuries/bruising
 - 2.2.2.5.3. Distinguishing marks
 - 2.2.2.5.4. Use of a scale
 - 2.2.2.5.5. Bite marks
 - 2.2.2.6. Camera Settings
 - 2.2.2.6.1. ISO
 - 2.2.2.6.2. White balance
- 2.2.3. Video Recording
 - 2.2.3.1. Night and day
- 2.2.4. Disposition of photos
 - 2.2.4.1. Uploading
 - 2.2.4.2. Writing of DVD



2.3. Reading Assignments

- *Crime Scene Photography, Edition II*, by Edward Robinson, Chapter 4, pgs. 126-128, 137-142, 155-162, Chapter 5, pgs. 250-285
- *Practical Crime Scene Processing and Investigation, Second edition* by Ross Gardner; Chapter 6, pgs. 135-155, 172-180

2.4. Learning Outcomes

- 2.4.1. The trainee can successfully photograph a crime scene
- 2.4.2. The trainee can successfully photograph a comparative quality image
- 2.4.3. The trainee can successfully complete a video recording of a crime scene
- 2.4.4. The trainee can upload images to the digital image storage system and write a DVD

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:

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3. Latent Print Processing

3.1. Learning Objectives

- 3.1.1. To properly select and utilize powders and a variety of lifting medium to develop and lift latent friction ridge detail

3.2. Training Outline

- 3.2.1. Surface evaluation
- 3.2.2. Use of lighting techniques for searching
- 3.2.3. Powder selection
 - 3.2.3.1. Volcanic powders
 - 3.2.3.2. Magnetic powders
 - 3.2.3.3. Specialized powders
 - 3.2.3.3.1. Fluorescent
 - 3.2.3.3.2. Bi-chromatic
- 3.2.4. Brush care and handling
- 3.2.5. Selection of lifting medium
 - 3.2.5.1. Tapes
 - 3.2.5.2. Gel lifts
 - 3.2.5.3. Flexible casting material

3.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 2, pgs. 28-30, Chapter 9, pgs. 258-274
- *Scott's Fingerprint Mechanics*, by Robert Olsen; Chapter 66, pgs. 209-233

3.4. Learning Outcomes

- 3.4.1. The trainee can properly utilize regular and specialized powders
- 3.4.2. The trainee can successfully create a flexible cast on a variety of surfaces (curved, vertical, textured)

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



4. General Crime Scene Investigation

4.1. Learning Objectives

- 4.1.1. To document the crime scene and evidence to accurately represent the scene and evidence through discussion, notes, and a plan

4.2. Training Outline

- 4.2.1. Scene security
 - 4.2.1.1. Red perimeter
- 4.2.2. Briefings
- 4.2.3. Walk-through
 - 4.2.3.1. Officer-involved-shooting (OIS) scenes
- 4.2.4. Developing a plan for scene processing
 - 4.2.4.1. Task delegation
- 4.2.5. Understanding the role and importance of physical and biological evidence
- 4.2.6. Scene processing above and beyond requests
- 4.2.7. Notes and reports
 - 4.2.7.1. Required forms
 - 4.2.7.2. Required report format
 - 4.2.7.2.1. Information required in each

4.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 4, pgs. 79-85, Chapter 5, pgs. 95-98, Chapter 8, pgs. 223-228

4.4. Learning Outcomes

- 4.4.1. The trainee is able to verbally describe reasons for a briefing and a walk-through at the beginning of the scene.
 - 4.4.1.1. Trainee can describe the difference between a walk-through at a regular scene and an officer-involved-shooting scene.
 - 4.4.1.2. The trainee is able to describe how CSU notes, reports and photographs affect an investigation
 - 4.4.1.3. Trainee is able to describe why they would process above and beyond an investigator's request
 - 4.4.1.4. Trainee is able to describe why CSU is tasked with the responsibility of thoroughly processing the scene
 - 4.4.1.5. Trainee can demonstrate the ability to assess a scene and develop a plan for appropriate processing



- 4.4.1.6. Trainee is able to describe the importance of taking detailed notes at the scene
- 4.4.1.7. Trainee can demonstrate the ability to identify relevant physical and possible biological evidence at a crime scene
- 4.4.1.8. Trainee can demonstrate the ability to properly write a report, including using correct spelling, grammar, and punctuation

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:

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5. Collection/Packaging/Impounding of Evidence, Health and Safety

5.1. Learning Objectives

- 5.1.1. To collect and package evidence to ensure there is no loss or deleterious change to the evidence. Trainee will also learn to properly use evidence storage locations and how to properly impound different items of evidence.
- 5.1.2. To provide information on potential safety and biohazard situations

5.2. Training Outline

- 5.2.1. Separation of items
- 5.2.2. Proper marking and securing of evidence for transport
 - 5.2.2.1. Case number on container
 - 5.2.2.2. Container secured/clipped closed
- 5.2.3. Chain of Custody
- 5.2.4. Drying wet evidence
- 5.2.5. Biological evidence collection/packaging
- 5.2.6. Trace evidence collection/packaging
- 5.2.7. All other evidence collection/packaging
- 5.2.8. Integrity seals
- 5.2.9. Keeping original packaging
- 5.2.10. Biohazard trash
- 5.2.11. Drying cabinet logs
- 5.2.12. Cleaning the drying cabinets
- 5.2.13. Personal protective equipment (PPE)
- 5.2.14. Red perimeter tape and required PPE at crime scenes

5.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapters 1-2

5.4. Learning Outcomes – Evidence

- 5.4.1. The trainee can demonstrate how to use temporary evidence lockers
- 5.4.2. The trainee can demonstrate how to use drying cabinets
- 5.4.3. The trainee can demonstrate how to properly document, package, and impound wet evidence items
- 5.4.4. The trainee can demonstrate how to secure and package a firearm
- 5.4.5. The trainee can demonstrate how to properly document, collect, package, store and impound a total of thirty or more items from at least three different scenes



5.5. Learning Outcomes – Health and Safety

- 5.5.1. The trainee is able to demonstrate personal protective equipment requirements
- 5.5.2. The trainee can explain the importance of the drying cabinet logs and cleaning the cabinet
- 5.5.3. The trainee is able to understand actions to be taken if exposed to a contaminant
- 5.5.4. The trainee can correctly establish a red perimeter when required and wear required PPE

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:

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6. Measuring, Sketching, Diagramming

6.1. Learning Objectives

- 6.1.1. To become familiar with the different types of sketches and measuring techniques and choose the appropriate one for the type of scene.

6.2. Training Outline

- 6.2.1. Types of sketches – depicting a visual representation of the crime scene
- 6.2.1.1. Birdseye/overhead/floorplan
 - 6.2.1.2. Elevation
- 6.2.2. Measuring methods
- 6.2.2.1. Baseline
 - 6.2.2.2. Triangular
 - 6.2.2.3. Rectangular

6.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 7

6.4. Learning Outcomes

- 6.4.1. The trainee can complete a rough sketch of an interior and exterior scene. Each location should include at least five items of evidence. Then complete a computerized diagram in Scene PD
- 6.4.2. Measure ten items of evidence, measurements of interior and exterior scenes utilizing each of the following types of measuring devices: laser distance, tape measure and roll-a-tape

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



7. Bullet Trajectory

7.1. Learning Objectives

- 7.1.1. To properly document bullet defects in different substrates

7.2. Training Outline

- 7.2.1. Equipment needed for documentation
 - 7.2.1.1. Sticky letters/scales
 - 7.2.1.2. Trajectory rods
 - 7.2.1.3. String
 - 7.2.1.4. Laser
 - 7.2.1.5. Angle finder
- 7.2.2. Photography
 - 7.2.2.1. Overall, mid-range, close-up
 - 7.2.2.2. Overhead

7.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 10, pgs. 299-304, 311-323

7.4. Learning Outcomes

- 7.4.1. The trainee can properly document the basic trajectory of a projectile into different substrates. Documentation must include labeling/markings and angle determination
 - 7.4.1.1. Vehicle
 - 7.4.1.2. Room/walls/furniture

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



8. Processing Vehicles

8.1. Learning Objectives

- 8.1.1. To properly process a vehicle that has multiple tasks
- 8.1.2. To properly complete paperwork for vehicle processing

8.2. Training Outline

- 8.2.1. Processing a vehicle that has multiple tasks
 - 8.2.1.1. Photography
 - 8.2.1.2. Sequence of processing
 - 8.2.1.3. Searching
 - 8.2.1.4. DNA
 - 8.2.1.5. Latent print processing
 - 8.2.1.6. GSR collection
 - 8.2.1.7. Trace evidence
 - 8.2.1.8. Documentation

8.3. Learning Outcomes

- 8.3.1. The trainee can successfully process a vehicle that has multiple tasks to be completed, such as latent prints, DNA, evidence collection, photography of damage
- 8.3.2. The trainee can demonstrate how to complete necessary paperwork related to vehicle processing

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



9. Processing People

9.1. Learning Objectives

- 9.1.1. To properly photograph a person, including injuries and identifying information, as well as process a person for GSR and/or buccal swabs

9.2. Training Outline

- 9.2.1. Photography
 - 9.2.1.1. All four sides of a person, plus close-up of face
 - 9.2.1.2. Photos with and without a scale of measure
- 9.2.2. Collect buccal swabs to obtain a reference standard for DNA testing
- 9.2.3. To collect GSR from a person or an object, such as a vehicle

9.3. Reading Assignments

- *Crime Scene Photography, Edition II* by Edward Robinson; Chapter 6, pgs. 358-363

9.4. Learning Outcomes

- 9.4.1. The trainee can demonstrate how to utilize a GSR kit on a subject
- 9.4.2. The trainee can demonstrate how to collect and package a buccal swab
- 9.4.3. The trainee can demonstrate how to photograph a subject, including any injuries or other identifying marks with and without an ABFO scale

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



10. Phenolphthalein

10.1. Learning Objectives

- 10.1.1. To properly utilize phenolphthalein to test for suspected blood

10.2. Training Outline

- 10.2.1. Contents of each bottle in the kit
- 10.2.2. Positive and negative controls
- 10.2.3. When to test a substance
- 10.2.4. When to collect a sample
- 10.2.5. Note-taking requirements
 - 10.2.5.1. Lot number
 - 10.2.5.2. Results of test

10.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 11, pgs. 353-355

10.4. Learning Outcomes

- 10.4.1. The trainee can demonstrate how to properly complete a presumptive test for blood, including taking proper notes
- 10.4.2. The trainee can successfully define presumptive testing and limitations of the presumptive test
- 10.4.3. The trainee can identify a possible false positive and explain how to document the result

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



11. Bloodstain Pattern Evidence

11.3. Learning Objectives

- 11.3.1. To appropriately document bloodstain pattern evidence so that qualified bloodstain pattern experts can analyze and draw conclusions of the blood-letting event from the documentation.

11.4. Training Outline

- 11.4.1. Searching for bloodstains utilizing white light or a forensic light source
- 11.4.2. Basic pattern types
- 11.4.3. Documenting blood in crime scenes
 - 11.4.3.1. Notes
 - 11.4.3.2. Diagram/sketch
 - 11.4.3.3. Report
- 11.4.4. Photography
- 11.4.5. Sampling – collecting samples from pattern areas
- 11.4.6. Roadmapping

11.5. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 11, Pgs. 331-353

11.6. Learning Outcomes

- 11.6.1. The trainee can assist an experienced crime scene investigator with documenting and processing one real or mock scene where bloodstain pattern documentation is needed
- 11.6.2. The trainee can demonstrate the process of roadmapping bloodstain patterns

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



12. Latent Bloodstain Enhancement

12.1. Learning Objectives

- 12.1.1. To utilize chemicals to search for latent bloodstains and successfully photograph any reaction and/or results

12.2. Training Outline

12.2.1. BlueStar

- 12.2.1.1. Chemical safety
- 12.2.1.2. Sequence of processing
- 12.2.1.3. Control tests
- 12.2.1.4. Application/spraying of BlueStar
- 12.2.1.5. Notes
- 12.2.1.6. Photography
- 12.2.1.7. False positives

12.2.2. Amido Black and Leuco Crystal Violet (LCV)

- 12.2.2.1. Chemical safety
- 12.2.2.2. Sequence of processing
- 12.2.2.3. Choosing the correct chemical
- 12.2.2.4. Control tests
- 12.2.2.5. Notes
- 12.2.2.6. Photography
- 12.2.2.7. False positives

12.3. Reading Assignments

- HFSC Latent Print Section SOP – Amido Black
- HFSC Latent Print Section SOP – Leuco Crystal Violet
- BlueStar Forensic User Instructions:
 - https://www.bluestar-forensic.com/pdf/en/instructions_bluestar_kit.pdf
[December 2012]

12.4. Learning Outcomes

- 12.4.1. The trainee can demonstrate an understanding of chemical selection
- 12.4.2. The trainee can identify a false positive for Bluestar and how to document the result
- 12.4.3. The trainee can demonstrate how to prepare and apply Bluestar
- 12.4.4. The trainee can successfully photograph and document the reaction
- 12.4.5. The trainee can demonstrate how to prepare and apply Amido Black and LCV
- 12.4.6. The trainee can successfully photograph the result



Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:

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13. Adhesive lifts/Gel lifts/Electronstatoc dust print lifter (EDPL)

13.1. Learning Objectives

- 13.1.1. To utilize adhesive/gel lifts to capture and collect developed patterns on a surface
- 13.1.2. To utilize the EDPL to lift and collect impressions in dust

13.2. Training Outline

- 13.2.1. EDPL
 - 13.2.1.1. What surfaces work with the EDPL
 - 13.2.1.2. Searching for shoeprints in dust
 - 13.2.1.3. Safety while using the EDPL
 - 13.2.1.4. Lifting
 - 13.2.1.5. Transporting EDPL lifts
 - 13.2.1.6. Photographing EDPL lifts

13.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 9, pgs. 281-284

13.4. Learning Outcomes

- 13.4.1. The trainee can utilize adhesive/gel lifts to capture and collect developed patterns on a surface.
- 13.4.2. The trainee can utilize the EDPL to lift and collect impressions in dust

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



14. Casting – Shoe/Tire Impressions and Tool Mark Impressions

14.1. Learning Objectives

- 14.1.1. To properly mix and cast a 3-dimensional impression using a hard or soft casting material

14.2. Training outline

- 14.2.1. Casting – shoe/tire impressions to provide a 3-dimensional cast
 - 14.2.1.1. Photography
 - 14.2.1.2. Mixing casting material
 - 14.2.1.3. Properly pour casting material
 - 14.2.1.4. Casting on concrete (2D cast)
 - 14.2.1.5. Casting on water
 - 14.2.1.6. Retrieval of and packaging the cast
- 14.2.2. Tool marks – collect and preserve possible tool mark impressions
 - 14.2.2.1. Photography
 - 14.2.2.2. Properly apply casting material
 - 14.2.2.3. Retrieval and packaging the cast

14.3. Reading Assignments

- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 9, pgs. 278-281, 284-294

14.4. Learning Outcomes

- 14.4.1. The trainee can demonstrate how to properly cast two 3-D impressions with hard casting material
- 14.4.2. The trainee can demonstrate how to properly cast a tool mark impression with soft casting material

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



15. Metal Detector

15.1. Learning Objectives

15.1.1. To utilize a metal detector to selectively locate metallic evidence

15.2. Training Outline

15.2.1. Searching a scene with a metal detector

15.2.1.1. Recognizing different tones

15.2.1.2. Proper search techniques and use of equipment

15.3. Learning Outcomes

15.3.1. Trainee will demonstrate how to operate a metal detector to search for items at a crime scene. **can be demonstrated in a mock scene**

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



16. Forensic/Alternate (FLS/ALS) Light Source

16.1. Learning Objectives

- 16.1.1. To properly use the Forensic/Alternate light source to identify possible trace or biological evidence

16.2. Training Outline

- 16.2.1. Use as a searching tool for body fluids and trace evidence
- 16.2.2. Wavelengths, goggles and filters
- 16.2.3. Photograph an FLS reaction

16.3. Reading Assignments

- HFSC Latent Print Section SOP- CrimeScope CS-16-500 Operating Procedures
- *Practical Crime Scene Processing and Investigation, Second Edition* by Ross Gardner; Chapter 9, pgs. 239-242, 245-246

16.4. Learning Outcomes

- 16.4.1. The trainee can demonstrate how to use the FLS to locate a body fluid stain or trace evidence
- 16.4.2. The trainee can successfully photograph a fluorescing stain
- 16.4.3. The trainee can properly explain what safety precautions should be observed when using the FLS

Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:



17. Courtroom Testimony/Procedures

17.1. Learning Objectives

- 17.1.1. To learn about court-related procedures and give testimony in a mock court

17.2. Training Outline

- 17.2.1. Location of District Attorney's (DA's) office/courthouse
 - 17.2.1.1. Parking
- 17.2.2. Courtroom demeanor
 - 17.2.2.1. Grooming/dress
 - 17.2.2.2. Tone of voice
 - 17.2.2.3. Answering questions on the stand
 - 17.2.2.3.1. Use of acronyms or jargon
 - 17.2.2.3.2. Yes, no, I don't know responses
 - 17.2.2.4. Treating defense and prosecution the same
- 17.2.3. Courtroom procedures
 - 17.2.3.1. Subpoena notification
 - 17.2.3.2. Swearing in
 - 17.2.3.3. Voir dire
 - 17.2.3.4. Establishing foundation for evidence admission
 - 17.2.3.5. Direct examination
 - 17.2.3.6. Cross examination
 - 17.2.3.7. Addressing the judge

17.3. Reading Assignments

- *Criminal Investigation* by Charles Swanson and Neil Chamelin; Chapter 24 (See Appendix)

17.4. Learning Outcomes

- 17.4.1. The trainee will process a mock scene to include at minimum: photography, notes, report, sketch, final diagram, evidence collection and powder processing. Trainee will present their findings during a mock trial. The trainee will defend their work and processes used.



Outcomes successfully completed:

Trainer: _____ Date: _____

Trainee: _____ Date: _____

Additional Notes:

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CSU Field Training Checklist

All tasks in the below checklist may not be encountered at scenes during the training period. Trainers should review tasks not encountered at scenes with the trainee during the training program and, if possible, create mock exercises for the trainee to demonstrate competency. If a topic was only discussed (such as aerial photography) indicate "N/A" in the other columns.

Administrative Tasks			
Topic	Date discussed	Trainer initials	Trainee initials
Calling in sick or late			
Clocking in and out			
Requesting time off in Paylocity			
Vehicle fuel stations			
Location of Property			
Location of NOCC			
Damage to vehicles			

Learning Objective	Date discussed	Date satisfactorily performed	Trainer initials	Trainee initials
Photography				
General scene photos				
Comparative quality				
Forensic Light Source				
Live subjects				
Camera settings (ISO, white balance)				
Video recording				
Uploading to Dataworks				
Write DVD for submitting agency and case file				
Latent Print Processing				
Use of light				
Powder selection				
Brush care and handling				
Selection and use of lift medium				



Learning Objective	Date discussed	Date satisfactorily performed	Trainer Initials	Trainee initials
General Scene Investigation				
Red perimeter				
Briefings/Walk-through				
Develop a plan				
Notes and reports				
Evidence				
Separation of items				
Proper marking/securing				
Chain of custody				
Drying wet evidence				
Biological and trace evidence collection				
Integrity seals				
Drying cabinet logs				
Biohazard trash				
Cleaning drying cabinets				
PPE				
Measuring/Sketching				
Overhead sketch				
Elevation sketch				
Baseline measuring				
Triangular measuring				
Rectangular measuring				
Trajectory				
Equipment needed				
Photography				
Processing Vehicles				
Photography				
Searching				
DNA collection				
Latent prints				
GSR collection				



Learning Objective	Date discussed	Date satisfactorily performed	Trainer Initials	Trainee initials
Processing Vehicles (cont.)				
Trace evidence				
Processing People				
Photography				
Buccal swab				
GSR				
Presumptive blood test				
Kit contents				
Controls				
Note-taking				
Bloodstain Patterns				
Searching				
Documentation				
Photography				
Sampling				
Roadmapping				
Latent Bloodstain Enhancement				
Bluestar				
Amido Black				
LCV				
Adhesive Lifts				
Gel lifts				
EDPL				
Casting				
3D cast shoes/tire				
Tool marks				



Learning Objective	Date discussed	Date satisfactorily performed	Trainer Initials	Trainee initials
Metal Detector				
Performance check				
Searching				
FLS/ALS				
Wavelength/goggles				
Filters				
Photography				

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TRAINEE WEEKLY REPORT GUIDE

Types of Calls: (Trainee)

List all calls answered. Include case #, location, incident type, and a brief synopsis of the case.

Processing done by Trainee:

Check all types of processing that the trainee completed.

Photography

- Outdoor Indoor Night
 Crime Scene Vehicle Subject Victim (Deceased) Evidence

Comparison:

- Footwear Fingerprint Tool Marks

Technique:

- Tripod Scale Case Information marker Angle Finder Fill the Frame
 Sync Cord Flash Angle Camera Settings

Latents

- Black Powder Magnetic Mix Other

Other

- Sketch Video GSR Swabs Trace Measurements Tire

Comments: (Trainer)

Depending on what is checked above, make comments on any issues or progress.

Example: Discussed using a cork to lift a latent print off a textured surface or to remove air bubbles. Discussed differences in angle of light for footwear impressions verses footwear imprints.

Trainee didn't process the point of entry

Downtime Activities: (Trainee)

List all downtime activities that the trainee completed for the week. List whether the activity was self-initiated or assigned by trainer. Also mention if the activity was not completed.

Example: Read CSI Manual; self-initiated



Drove to substations and photographed the exterior of the building using night time photography; assigned by trainer

Training done with Trainer: *(Trainee)*

List any training that is completed between the trainer and trainee. Briefly describe the training topic and what activities the trainee completed, if any.

Example: How to complete a computerized final sketch. Explained the program to trainee. Trainee then created a final sketch of her armed robbery call from last week

Report Writing: *(Trainer)*

List the number and types of reports written by the trainee. Also, detail any corrections, especially if recurring, which were noted on the reports. Example:

Example: Reports are well written with very few grammatical mistakes.

However, trainee forgot to list the Evidence Collected section on two of the reports. This issue was discussed with the trainee two weeks ago, last week, and was discussed again this week. The trainee has until the end of next week to display improvement in this area.

Crime Scene Management: *(Trainer)*

Explain how trainee obtains information on scene (from whom, asks additional questions when needed, does walk-through and briefing, obtaining information throughout scene processing). Does trainee execute a logical processing sequence (all processing needed, processing done in correct order, handles interruptions and diversions properly)? Can trainee transfer processing skills from scene to scene (knows when it is relevant to process for latents, DNA, etc.)?

Example: While processing an aggravated assault with 4 bullet holes that entered the residence and 6 cartridge cases located in the street, the trainee failed to search for additional bullet holes. She only noted the bullet holes that were pointed out to her by the officer and ignored the fact that she had 2 extra cartridge cases. After discussion of this with the trainer, the trainee did locate 2 additional bullet holes.

Concerns, Comments, Discussions: *(Both)*

List any positive comments, concerns, and discussions between the trainee and trainer. Mention any issues that were observed on above listed crime scenes and/or processing completed (not already discussed above). Also, list any positive or negative issues with attitude, time management, and/or personal well-being.

Example: Trainee's photographs are very good. The photographs are in focus, follow a logical progression through the crime scene, are composed well, and have proper lighting.