

**I. CATALOG DESCRIPTION:**

- A. Department Information
- |                |   |
|----------------|---|
| Division:      | Criminal Justice                          |
| Department:    | Police Science                            |
| Course Number: | CRMJUS 086                                |
| Course Title:  | Introduction to Crime Scene Investigation |
| Prerequisite:  | None                                      |
| Lecture:       | 24 Hours                                  |
| Lab:           | 30 Hours                                  |
| Units:         | 2.0 Per semester                          |
- B. Catalog and Schedule Description:  
This course is designed to be an introductory level course for those persons considering a career in Forensic Sciences or Criminalistics. Lecture topics include securing a crime scene, identification and collection of evidence at crime scenes, processing evidence and crime scenes for latent fingerprints, basic fingerprint pattern recognition, basic crime scene photography, documentation of the crime scene and the examinations performed, a discussion of common mistakes and how to avoid making them and an introduction to courtroom presentation and testimony.

**II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: One**

**III. EXPECTED OUTCOME FOR STUDENTS:**

Upon successful completion of the course the student should be able to:

- A. Secure and log a crime scene.
- B. Recognize items with evidentiary value.
- C. Properly collect and package different types of evidence.
- D. Understand and maintain "Chain of Custody".
- E. Recognize identifiable latent fingerprints.
- F. Use basic fingerprint powders to locate and collect latent fingerprints.
- G. Understand the basic operations of a 35mm camera.
- H. Use 35mm photography to document the scene.
- I. Create a crime scene sketch.
- J. Use notes to document crime scene processing.
- K. Write clear, grammatically correct professionally crime scene report.
- L. Understand the basics of court presentation and testimony.
- M. Understand courtroom procedures and terminology.
- N. Simulate professional conduct when testifying.

**IV. CONTENT:**

- A. Health and Safety at Crime Scenes
  - 1. Biological hazards
    - a) Animal and Human waste
    - b) Mold & fungus
    - c) Trash
  - 2. Structural hazards
    - a) Exposed electrical
    - b) Shoddy construction
  - 3. Natural hazards
    - a) Terrain
    - b) Weather
    - c) Flora and Fauna
      - i. insects
      - ii. snakes
      - iii. poisonous plants
      - iv. cactus and other pointy succulents
      - v. dogs
  - 4. Human hazards
    - a) Suspects in hiding
    - b) "Lookie Loos"
- B. Responding to crime scenes
  - 1. Radio communication
  - 2. Response vehicles
  - 3. Driver responsibilities
  - 4. Emergency lights
- C. Map Reading
- D. Note Taking
  - 1. Briefing information
    - a) Victim/Suspect identity
    - b) Case agent / case number
    - c) Other significant identities
      - i. witnesses
      - ii. relatives
      - iii. responding officers
    - d) Case circumstances
    - e) Action times i.e. 10-8, 10-97, scene entry
  - 2. Initial observations
    - a) Lights, T.V.; on or off
    - b) Windows, doors; locked or unlocked, standing open, broken
    - c) Temperature inside and/or outside
    - d) Weather; windy, rainy
    - e) Insect / Animal activity
  - 3. Placards
  - 4. Other notes
    - a) Elimination photos taken
    - b) Evidence received from others
    - c) Other exams carried out

- E. Evidence
  - 1. The Locard Exchange Principle
  - 2. Evidence characteristics
    - a) Class characteristics
    - b) Individual (accidental) characteristics
  - 3. Identifying Evidence
    - a) What constitutes evidence
      - i. belongs in scene
      - ii. doesn't belong in scene
      - iii. outside information
    - b) Types of evidence
      - i. transitory evidence
      - ii. collectable evidence
      - iii. spoken evidence
      - iv. "positive" and "negative" evidence
  - 4. Placards
    - a) Types
    - b) Placement
  - 5. Trace Evidence
    - a) Identifying
    - b) Value
    - c) Collection
    - d) Packaging
  - 6. Biological Evidence
    - a) Identifying
    - b) Value
    - c) Collection
    - d) Packaging
  - 7. Toolmark Evidence
    - a) Identifying
    - b) Collection
    - c) Packaging
    - d) Mikrosil
  - 8. Firearms Evidence
    - a) Safety
    - b) Terminology
    - c) Weapon collection
  - 9. General Evidence Packaging
  - 10. Unusual sizes and shapes
  - 11. Labeling
- F. Sketching
  - 1. Different views
    - a) Bird's eye
    - b) Exploded
    - c) 3-Dimensional
  - 2. Rough vs. Finished
    - a) "To Scale" drawings
    - b) Computer drawings
- G. Photography
  - 1. Overalls, mid-range, close-ups
  - 2. Use of scales
  - 3. Use of flash
  - 4. "Point and Shoot" cameras

- H. Impression Evidence
  - 1. Tire tracks
  - 2. Shoe prints
  - 3. Sketching
  - 4. Documenting impression trails
  - 5. Use of Polaroids
  - 6. Photography
  - 7. Tape lifts
- I. Fingerprints
  - 1. History of fingerprinting
  - 2. Biology of fingerprints
  - 3. Pattern recognition
    - a) Loops
    - b) Whorls
    - c) Arches
  - 4. Pattern identification
    - a) Core
    - b) Delta
    - c) Type lines
  - 5. Fingerprint comparison
    - a) Points of minutiae
      - i. bi-furcations
      - ii. ending ridges
      - iii. islands and dots
    - b) Scars
      - i. permanent
      - ii. repairable
      - iii. intentional
  - 6. Inked fingerprints
    - a) Ten-print cards
    - b) Palm cards
    - c) Elimination prints
- J. Fingerprint Evidence
  - 1. Types of prints
    - a) Latent
    - b) Patent
    - c) Plastic
  - 2. Nature of latent prints
    - a) Sweat based prints
    - b) Oil based prints
  - 3. Non-porous surfaces
  - 4. Porous surfaces
  - 5. Semi-porous surfaces
  - 6. Other factors
    - a) Weather
    - b) Human element
    - c) Movement
    - d) Time
- K. Latent Print Developments
  - 1. Health and Safety in the processing lab
  - 2. Latent processing equipment
    - a) Brushes
    - b) Powders
    - c) Lifting tape
    - d) Lift cards

3. Dusting and Lifting
  - a) Use and limitations
  - b) Plain powders
  - c) Magnetic powders
4. Superglue Fuming
  - a) Uses and limitations
  - b) Superglue chambers
  - c) Superglue wands
  - d) Supergluing in the field
5. Ninhydrin processing
  - a) Uses and limitations
  - b) Standard processing
  - c) Photography
6. Flow charts
7. Latent processing at crime scenes
- L. Chain of Custody
- M. Courtroom Procedures
  1. Proper appearance
  2. Proper conduct
  3. Preparation
  4. "Educating the Jury"
  5. Displays
  6. Re-enactments
- N. Report Writing (review)

**V. METHODS OF INSTRUCTION:**

- A. Lecture
- B. Discussion
- C. Visual presentations
- D. Demonstration
- E. Hands-on exercises
- F. Practical exercises

**VI. TYPICAL ASSIGNMENTS:**

- A. Reading
- B. Class and Group Discussions of Significant Issues and Topics
- C. Outside photography assignments
- D. Hands-on exercises, such as:
  1. Dusting items for latent fingerprints
  2. Packaging evidence items
  3. Proper collection of evidence items
  4. Recognition of evidence in photographs
  5. Mock crime scene processing
  6. Report writing
  7. Create court displays / demonstrations

**VII. EVALUATION:**

- A. Methods of Evaluation
  1. Feedback/Discussions
  2. Practical exercises after each subject taught
  3. Midterm examination, multiple choice and true/false
  4. Final examination, multiple choice and true/false
  5. Final examination, mock crime scene
  6. Final examination, mock court

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- B. Frequency of Evaluation
  - 1. Feedback and discussion throughout course as deemed necessary
  - 2. Practical exercises after each subject is taught
  - 3. Examinations as outlined above
- C. Typical Exam Questions:
  - 1. An example of TRACE evidence would be:
    - a) Cat hairs
    - b) Carpet fibers
    - c) Broken glass
    - d) All of the above
  - 2. NINHYDRIN should always be used on non-porous items
    - a) True
    - b) False

**VIII. TYPICAL TEXT:**

Current text(s) and/or handouts provided by instructor as approved by P.O.S.T. and San Bernardino Valley College.

**IX. OTHER SUPPLIES REQUIRED BY STUDENTS:**

35mm camera

Items to fingerprint (commonly found around the household)