

I. CATALOG DESCRIPTION:

A. Department Information

Division: Criminal Justice
Department: Police Science
Course Number: CRMJUS 088
Course Title: Advanced Crime Scene Investigation
Prerequisite: CRMJUS 087
Lecture: 24 Hours
Lab: 30 Hours
Units: 2.0 Per semester

B. Catalog and Schedule Description:

This course is designed to be an advanced level course for those persons considering a career in Forensic Sciences or Criminalistics. Lecture topics include reviewing the critical components of the basic and second level CSI classes, identification and collection of evidence at crime scenes involving death (homicides, suicide, accidental death and homicides that involve additional violence, such as sexual assault), processing of the deceased for physical evidence, latent fingerprints and other clues relating to the identity of the assailant, shooting reconstruction and gravesite excavation. This course will also discuss other specialties available to the death investigator, such as Forensic Anthropology, Entomology and Odontology.

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. Recognize, collect and document complex evidence.
- B. Apply specialized skills such as Gunshot Trajectory Reconstruction
- C. Recognize the basic aspects of Bloodstain Pattern Interpretation.
- D. Compare the different stages of death and decomposition.
- E. Understand advanced operations of a 35mm camera.
- F. Have knowledge of specialized fields such as Anthropology, Entomology and Odontology and know how to properly secure evidence for those disciplines.
- G. Use advanced 35mm photography skills to document crime scenes.
- H. Assemble and collect sexual assault evidence from deceased victims.
- I. Identify the proper technique for gravesite excavation

IV. CONTENT:

A. Health and Safety

1. Review
2. Decomposition
3. Post-blast damage

B. Initial response – review

C. Crime Scene survival

1. Beginners distress
 - a) Boredom
 - b) Impatience
 - c) Emotional disturbance
2. Intermediate distress
 - a) Hunger / Thirst
 - b) Tired
 - c) Nature calls
3. Advanced distress

- a) Personality conflicts
 - b) Getting in a hurry
- D. Note taking from arrival to departure (review)
 - 1. Briefing information
 - 2. Initial observations
 - 3. Placard log
 - 4. Other notes to take
- E. Evidence (review)
 - 1. The Locard Exchange Principle
 - 2. Evidence characteristics
 - 3. Identifying evidence
 - 4. Placards
 - 5. Trace evidence
 - 6. Biological evidence
 - 7. Toolmark evidence
 - 8. Firearms evidence
 - 9. Gunshot residue
 - 10. General evidence packaging
 - 11. Unusual sizes and shapes
 - 12. Labeling
- F. Sketching (review)
 - 1. Types of views
 - 2. Scale
- G. Impression evidence (review)
- H. Latents (review)
 - 1. Pattern types
 - 2. Latent composition
 - 3. Superglue and powders
 - 4. Ninhydrin
 - 5. Sticky-side powder
 - 6. Rhodamine 6G
 - 7. Redwop powder
 - 8. Amido Black
 - a) Uses and limitations
 - b) Photography
 - 9. Reflected light
- I. Death investigation
 - 1. Homicide
 - 2. Suicide
 - 3. Suspicious death
 - 4. Coroner
- J. Bloodstains
 - 1. Recognition
 - 2. Patterns
- K. Photography
 - 1. Standard crime scene photography
 - 2. Back-up photography
 - 3. 1:1
 - 4. Polaroids
 - a) Uses and limitations
 - 5. Digital
 - a) Uses and limitations
 - b) Legal limitations
 - 6. Videotape
 - a) Crime scene
 - b) Re-enactments

- c) Testimony
- L. Body Processing
 - 1. Photography
 - 2. Sex Kit application
 - 3. Latent prints on human skin
 - a) Superglue
 - b) Powders
 - c) Transfer
 - 4. Inked prints
- M. Decomposition
 - 1. Lividity
 - 2. Rigor mortis
 - 3. Stages of decomposition
- N. Forensic Entomology
 - 1. Natural progression
 - 2. Time of death
 - 3. Other insect clues
 - 4. Collection
 - 5. Preservation for analysis
- O. Gravesite excavation
 - 1. Locating gravesite
 - 2. Identifying perimeters
 - 3. Documenting
- P. Forensic Anthropology
 - 1. Human or animal
 - 2. Identification
 - a) Sex
 - b) Age
 - c) Stature
 - 3. Cause of death
 - 4. Bone scatter sites
- Q. Forensic Odontology
 - 1. ID through dental records
 - 2. Bite marks
 - a) Recognition
 - b) Swabbing
 - c) Photography
 - d) Casting
- R. Autopsy procedures
 - 1. Evidence collection
 - 2. Photography
 - 3. Reconstruction
 - 4. Chain of custody
- S. Post-blast scenes
- T. Officer Involved Shooting scenes
- U. Search warrants
- V. Chain of custody
- W. Courtroom Testimony 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. Proper collection of evidence for specialized examination
 - 2. Shooting reconstruction
 - 3. Gravesite excavation
 - 4. Basic bloodstain pattern recognition
 - 5. Mock crime scene processing
 - 6. Report writing
 - 7. Create court displays / demonstrations

VII. EVALUATIONS:

- 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
- 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. Amido black can be used for:
 - a) Any latent prints
 - b) To enhance bloody prints
 - c) Vertical surfaces only
 - d) To enhance bloody ridge detail only
 - 2. Latent fingerprints are often found on human skin
 - a) True
 - b) False

VIII. TYPICAL TEXT(S):

Current text(s) and/or handouts provided by instructor as approved by the Commission on Peace Officer Standards and Training (P.O.S.T.) and San Bernardino Valley College.

IX. OTHER SUPPLIES REQUIRED BY STUDENTS:

35mm camera