CRJU 112 Criminalistics

3 Credits

Community College of Baltimore County Common Course Outline

Description

CRJU 112 – Criminalistics: introduces students to crime scene investigation and the analysis of physical evidence typically found at crime scenes. The focus is on crime scene management, recognition, documentation, collection, preservation, and processing of crime scene evidence. CRJU113 is the laboratory associated with this course.

Co-requisites: ENGL 101

Overall Course Objectives

Upon completion of this course, students will be able to:

- 1. define Forensic Science or Criminalistics;
- 2. document the processes applied to securing the crime scene and preserving evidence;
- 3. interpret proper ethics, as it relates to forensic science and criminalistics;
- 4. identify the standards commonly applied to the various forensic techniques, analysis and comparisons;
- 5. demonstrate quantitative problem solving;
- 6. apply proper collaborative techniques as related to forensic science analysis;
- 7. communicate proper outcomes of scientific inquiry as they relate to forensics analysis;
- 8. describe appropriate and proper techniques in the usage of a variety of forensics analyses and their related equipment; and
- 9. describe the methods for analyzing forensic evidence, including analysis of DNA, physical evidence, fingerprints, biological evidence, trace evidence, impression evidence, questioned documents, arson, toxicology, etc.

Major Topics

- I. Introduction to forensic science
 - a. Definition
 - b. Major contributors to the development of forensic science
 - c. Role of the crime laboratory in criminal justice
- II. The crime scene procedures
 - a. Investigation procedures
 - b. Protecting the crime scene
 - c. Recordation of the crime scene
 - d. Search procedures
 - e. Legal considerations

The Common Course Outline (CCO) determines the essential nature of each course. For more information, see your professor's syllabus.

- III. Physical evidence
 - a. Common types
 - b. Identification and comparison
 - c. Class vs. individualization
 - d. Collection, preserving, packaging
- IV. Fingerprint evidence
 - a. Inked fingerprints
 - i. Patterns
 - ii. National Crime Information Center (NCIC) classification
 - b. Latent print development
 - i. Powder processing
 - ii. Chemical processing
 - c. Comparing fingerprints
- V. Trace evidence
 - a. Biological evidence
 - i. Blood evidence
 - ii. Blood spatter recognition
 - iii. Collection and preservation of blood evidence
 - b. Hair evidence
 - c. Fiber evidence
 - d. Paint evidence
 - e. Glass evidence
 - f. Soil evidence
- VI. Impression evidence
 - a. Firearm evidence and tool marks
 - b. Shoe and tire impressions
- VII. Questioned document examination
 - a. Handwriting analysis
 - b. Collection of evidence
 - c. Obtaining handwriting exemplars
 - d. Mechanically produced documents
 - e. Alterations, erasures, obliterations
 - f. Pen inks
- VIII. Arson and Explosion investigation
 - a. Scene investigation
 - b. Evidence collection
- IX. Forensic Toxicology
 - a. Alcohol detection
 - i. Breathalyzer
 - ii. Infrared breath-testing devices
 - iii. Implied consent law (Schmerber v. California)

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- b. Identifying drugs and poisons
 - i. Screening
 - ii. Confirmation tests
- X. Legal Considerations
 - a. Searching the crime scene
 - i. Legal intrusion
 - ii. Consent
 - iii. Search warrant
 - b. Seizing evidence
 - c. Expert Witness Testimony
 - i. Testifying as an expert witness
 - ii. Rules and court procedures

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- two tests
- one written assignment, such as a self-reflective essay about forensic science and what was learned

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

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