

## **Forensic Science Courses**

### **FOR 201 Introduction to Forensic Science (4 credits)**

This course will emphasize scientific investigation of crime. Students will become both detective and criminalist as they learn how to secure a crime scene, and collect and analyze physical evidence. Students will learn how to: 1) do blood typing and DNA analysis, 2) analyze blood splatter patterns, 3) analyze hair and fiber samples, 4) find and lift latent fingerprints and compare to established database, 5) identify the source of ink samples from handwritten notes, and 6) develop a psychological profile of the criminal. Using actual cases, the class will review forensic analysis of soil samples, bite marks, ballistics, and toxicology. Students will learn how to apply various mathematical and statistical tools to make judgments regarding the weight of the evidence, and to either identify or eliminate suspects. Legal issues such as the insanity defense, the reliability of eye-witnesses, and the utility and accuracy of lie detectors will be examined.

### **FOR 401 Crime Scene Investigation/Evidence Collection (3 credits)**

Advanced course in the identification and proper collection of physical evidence from a crime scene. Students will learn what types of collection containers are best suited to specific forms of evidence, so as to avoid possible contamination, and what alternatives may be available in the absence of a full crime-scene kit. The class will cover the importance of: 1) maintaining a chain of custody, 2) careful observation and recording of crime scenes, and 3) ordering the appropriate analytical tests. Students will further develop their understanding of legal issues related to collection, handling, and interpretation of evidence; issues and concepts related to eyewitness identification and testimony, such as the perception of events and retrieval of information from memory; and will learn how to search for witnesses and to develop suspects. Prerequisite: FOR 201 and upper level standing or consent of instructor.

### **FOR 402 Microanalysis of Trace Evidence (4 credits)**

Advanced course in the identification and analysis of physical evidence previously recovered from a crime scene. Students will learn what types of analysis is best suited to specific forms of evidence. The class will cover: 1) the importance of maintaining a chain of custody and proper documentation, 2) how the different major types of analysis are performed and how to choose the proper technique for the evidence, 3) the theory behind the techniques, and 4) how to discuss the accuracy and precision of the technique in relationship to such information as population statistics. Prerequisite: FOR 201 and upper level standing or consent of instructor