Administrative Unit: Criminal Justice Administration & Human Services Department

Course Prefix and Number: CJAD 335

Course Title: Criminalistics

Number of: Credit Hours: 3  Lecture Hours: 3  Laboratory Hours: 0

Catalog Description: Introduction to the scientific techniques commonly used in crime solving covering in detail all aspects of forensic science, the organization of a crime lab and how evidence is treated from the crime scene to the courtroom. Prerequisites: CHEM 110; BIOL 110; junior standing or instructor’s permission. Occasional offering.

Additional information: The criminalist is a key figure in crime solving using forensic analysis. As such, this course will familiarize the student with the role of the criminalist and the crime laboratory in which he or she works. The course will also introduce the student to the equipment used in analyzing the various types of evidence located on crime scenes.

Prerequisite(s)/Corequisite(s): CHEM 110; BIOL 110; junior standing or instructor’s permission.


Course Objectives:

- To understand modern laboratory techniques as they relate to the solving of crime.
- To utilize and understand equipment commonly used in crime laboratory settings and how different crimes can be scientifically scrutinized through the use of such equipment.
- To understand the professional link between the crime scene law enforcement investigator and the forensic criminalist.
- To introduce entry-level careers in the forensic sciences and demonstrate understanding of the crime scene laboratory and its functions.

Measurable Learning Outcomes:

- Define the crime laboratory as a viable component to criminal investigation.
- Explain the scientific underpinnings of forensic science.
• Understand various laboratory equipment through a practical laboratory setting.
• Understand various laboratory analysis techniques in a practical laboratory setting.
• Describe the practical functions of the Gas Chromatograph and the Mass Spectrometer.
• Understand how the results of laboratory analysis impact criminal convictions in a court of law.

Topical Outline (major areas of coverage):
• Introduction to the forensic sciences
• Historical development of the forensic sciences
• The role of the forensic laboratory
• Forensic evidence in court
• Forensic toxicology
• Bloodstain pattern interpretation
• Serology and DNA typing
• Crime laboratory instruments

Recommended maximum class size for this course: 30

Library Resources: Online databases are available at http://www.ccis.edu/offices/library/resources.asp. You may access them from off-campus using your eServices login and password when prompted.

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Date: November 10, 2005

NOTE: The intention of the master syllabus is to provide an outline of the contents of this course, as specified by the faculty of Columbia College, regardless of who teaches the course, when it is taught or where it is taught. Faculty members teaching this course for Columbia College are expected to facilitate learning pursuant to the course objectives and cover the subjects listed in the topical outline. However, instructors are also encouraged to cover additional topics of interest so long as those topics are relevant to the course’s subject. The master syllabus is, therefore, prescriptive in nature but also allows for a diversity of individual approaches to course material.

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