Miami Dade College

Course Description

CJE1640 | Crime Scene Technology 1 | 3.00 credits

This is an introductory course in Crime Scene Technology. Students will learn the techniques, materials, and instrumentation used in securing, searching, recording, collecting, and examining physical evidence. There will be special emphasis on the tools, instruments, and techniques used in the studies of crime scene reconstruction, fingerprints, firearms, tool marks, and bloodstain pattern analysis**.**

Course Competencies:

Competency 1: The student will demonstrate knowledge of crime scene investigation and forensic science by:

1. Discussing the major contributors to the development of forensic science
2. Describing the services of a crime laboratory
3. Explaining the role and responsibilities of the expert witness

Competency 2: The student will demonstrate knowledge of procedures for securing and searching a crime scene by:

1. Identifying the responsibilities of the responding officer
2. Describing the proper procedures for systematically searching crime scenes
3. Documenting initial observations and evidence collected

Competency 3: The student will demonstrate techniques used to record the crime scene by:

1. Describing the proper format and content of crime scene notes
2. Reviewing the basic features of film and digital photography
3. Creating a rough and finished crime scene sketch

Competency 4: The student will demonstrate the techniques used to collect crime scene evidence by:

1. Reviewing the physical evidence encountered at crime scenes
2. Illustrating the proper collection and packaging of physical evidence
3. Describing the chain of custody

Competency 5: The student will define physical evidence and evaluation instruments by:

1. Defining individual and class characteristics
2. Listing computerized databases of crime scene evidence
3. Identifying the contributions of crime scene professionals

Competency 6: The student will demonstrate knowledge of crime scene reconstruction by:

1. Identifying the processes of deductive reasoning, inductive reasoning, and falsifiability and how these processes are used in reconstruction
2. Describing crime scene reconstruction techniques
3. Reviewing the roles of evidence and re-enactments in crime scene reconstruction

Competency 7: The student will demonstrate knowledge of fingerprint collection techniques by:

1. Describing automated fingerprint identification systems
2. Listing the techniques and materials needed for developing latent fingerprints
3. Describing the procedures for preserving a developed latent fingerprint

Competency 8: The student will demonstrate knowledge of firearm evidence by:

1. Describing ballistics analysis: i.e., trajectory, striation, caliber, etc
2. Explaining firearms database systems
3. Listing procedures for the collection and preservation of firearm evidence

Competency 9: The student will demonstrate knowledge of tool mark and impression evidence by:

1. Comparing different tools to tool marks
2. Characterizing impressions
3. Identifying field reagents to enhance tool marks and impressions

Competency 10: The student will demonstrate knowledge of bloodstain pattern analysis by:

1. Calculating the angle of impact of a bloodstain using its dimensions
2. Distinguishing among the low, medium, and high-velocity impact spatter classifications
3. Explaining how these classifications are used
4. Determining the area of convergence and area of origin for impact spatter patterns

Learning Outcomes:

- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Demonstrate knowledge of ethical thinking and its application to issues in society