

**College of San Mateo**  
**Official Course Outline**

1. **COURSE ID:** ADMJ 185    **TITLE:** Introduction to Forensic Science    **C-ID:** AJ 150  
**Units:** 3.0 units    **Hours/Semester:** 32.0-36.0 Lecture hours; 48.0-54.0 Lab hours; and 64.0-72.0 Homework hours

**Method of Grading:** Letter Grade Only

**Recommended Preparation:**

Completion of or concurrent enrollment in ADMJ 100 and Eligibility for ENGL 100, or Eligibility for ENGL 105 and eligibility for MATH 110 or MATH 111/112

2. **COURSE DESIGNATION:**

**Degree Credit**

**Transfer credit:** CSU

3. **COURSE DESCRIPTIONS:**

**Catalog Description:**

This course provides an introduction to the role of forensics in criminal investigations. Discussion points include the methods utilized in the forensic analysis of scenes, pattern evidence, instruments, firearms, questioned documents and controlled substances.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**

Upon successful completion of this course, a student will meet the following outcomes:

1. Identify and explain the role of forensic specialists in the Criminal Justice System.
2. Distinguish between crime scene processing vs. crime scene reconstruction.
3. Identify the types of pattern evidence and explain their respective importance in crime scene reconstruction.
4. Identify the major fields of Forensic Science.
5. Apply the processes for collection, preservation and analysis of evidence.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**

Upon successful completion of this course, a student will be able to:

1. Identify and explain the role of forensic specialists in the Criminal Justice System.
2. Distinguish between crime scene processing vs. crime scene reconstruction.
3. Identify the types of pattern evidence and explain their respective importance in crime scene reconstruction.
4. Identify the major fields of Forensic Science.
5. Apply the processes for collection, preservation and analysis of evidence.

6. **COURSE CONTENT:**

**Lecture Content:**

1. Role of Forensic Science in the Criminal Justice System
  - A. Introduction
  - B. History
  - C. Background
  - D. Safety and Lab Basics, Lab Science Measurements
2. The Crime Scene
  - A. Crime Scene Analysis
  - B. Crime Scene Processing
  - C. Crime Scene Advanced Technology – Crime Scene Reconstruction
3. Analysis of Pattern Evidence in Investigations
  - A. Physical Evidence
4. Principles of Fingerprint Identification
  - A. Fingerprint Processing
  - B. Fingerprint Classification
  - C. Fingerprint Comparison
5. Types of Controlled Substance Evidence
  - A. Drugs, Toxicology, and DUI
6. Firearms and Tool Mark Analysis
  - A. Tool Marks and Firearms
7. Analysis of Document Evidence

- A. Questioned Documents
- 8. Collection, Preservation and Analysis of DNA Evidence
  - A. Blood Analysis-Serology
  - B. Blood Analysis – DNA

**Lab Content:**

- 1. Role of Forensic Science in the Criminal Justice System
  - A. Safety and Lab Basics, Lab Science Measurements (Lab)
- 2. The Crime Scene
  - A. Crime Scene Processing (Lab)
  - B. Trace Evidence Experiment (Lab)
- 3. Analysis of Pattern Evidence in Investigations
  - A. Experiment (Lab)
- 4. Principles of Fingerprint Identification
  - A. Fingerprint Processing Experiment (Lab)
  - B. Fingerprint Classification Practice (Lab)
  - C. Fingerprint Comparison Practice (Lab)
- 5. Firearms and Tool Mark Analysis
  - A. Firearm Experiment (Lab)
- 6. Analysis of Document Evidence
  - A. Questioned Documents Experiment (Lab)
- 7. Collection, Preservation and Analysis of DNA Evidence
  - A. Blood Experiment (Lab)
  - B. Blood Analysis – DNA (Lab, Demo, Film)
- 8. Arson and Explosives Evidence
  - A. Tour of San Mateo County Forensic Laboratory (Lab)

**7. REPRESENTATIVE METHODS OF INSTRUCTION:**

Typical methods of instruction may include:

- A. Lecture
- B. Lab

**8. REPRESENTATIVE ASSIGNMENTS**

Representative assignments in this course may include, but are not limited to the following:

**Writing Assignments:**

Write report corresponding to lab activity

**Reading Assignments:**

Reading assignments from the text

**Other Outside Assignments:**

Identify firearm used from bullet found

Math problems relating to crime scene processing

**9. REPRESENTATIVE METHODS OF EVALUATION**

Representative methods of evaluation may include:

- A. Class Participation
- B. Lab Activities
- C. Written examination

**10. REPRESENTATIVE TEXT(S):**

Possible textbooks include:

- A. Saferstein, R.. *Criminalistics - Introduction to Forensic Science*, 12th ed. Prentice Hall, 2018

**Origination Date:** August 2021

**Curriculum Committee Approval Date:** September 2021

**Effective Term:** Fall 2022

**Course Originator:** Michelle Schneider