Criminalistics II (CJSA 2323)

Credit: 3 semester credit hours (3 hours lecture)

Prerequisite/Co-requisite: none

Course Description

Theory and practice of crime scene investigation. Topics include report writing; blood and other body fluids: document examination; etchings, casts and molds, glass fractures; use of microscope and firearms identification.

Required Textbook and Materials

- 1. Forensic Science: An Introduction to Scientific and Investigative Techniques edited by Stuart H. James and Jon J. Nordby (3rd Edition)
 - a. ISBN number is 13: 978-1-4200-6493-3

Course Objectives (with applicable SCANS skills after each)

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

- 1. Describe and demonstrate the method and practice investigating a crime scene.
- 2. Demonstrate techniques for completing reports, identifying and processing other body fluid for laboratory analysis and completing exercises in casting and molds of evidence pertaining to the crime scene.

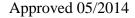
Course Outline

- A. Syllabus
 - 1. Introduction of Faculty and students
 - 2. Instructor Resume
 - 3. Comments
- B. Chapter 13
 - 1. The Forensic Laboratory
 - 2. The Role of the Criminalist
 - 3. Linking a Suspect to the Crime Scene
- C. Chapter 14 The Identification/ Characterization of Blood and Blood stains
 - 1. The Analysis of Blood in Forensic Science
 - 2. Identification of Blood
 - 3. Case Examples

- D. Chapter 15 Identification of Biological Fluids
 - 1. Identification of Semen in the Forensic Laboratory
 - 2. Methods of Identification of Saliva
 - 3. Other body fluids at the scene
- E. Chapter 16 Forensic DNA:

Technology, Applications, and the Law

- 1. Genetics and Inheritance of DNA Characteristics
- 2. DNA and the Courts
- 3. DNA Interpretations
- 4. Nonhuman DNA in Criminal Cases
- F. Chapter 17 Microanalysis and Examination of Trace Evidence





Course Syllabi

- 1. Techniques of Values to the Microanalyst
- 2. Microscopic Evidence and its Analysis

G. Chapter 18 Fingerprints

- 1. Fingerprints and evidence
- 2. What are fingerprints and their patterns
- 3. The History of Fingerprints
- 4. Fingerprint classifications, files and evidence

H. Chapter 19 Forensic Footwear Evidence

- 1. Forms of Footwear Impressions
- 2. Recovery and enhancement Impressions
- 3. Case Studies

I. Chapter 20 Forensic Tire and Track Evidence

- 1. Original Equipment Construction and Identification
- 2. Tread Nomenclature
- 3. Tire tread factors and Track Evidence
- 4. Tire Impressions and the Examination Process

J. Chapter 21 Firearm and Tool Mark Examination

- 1. Types of Modern Firearms
- 2. Manufacture of Firearms
- 3. Firearm Ammunition
- 4. Collection of Firearms-Related Evidence
- 5. Laboratory Examinations
- 6. Types of Tool Marks
- 7. Processing of Tool Marks at the Crime Scene
- 8. Case Studies

K. Chapter 22 Questioned Documents

1. Functions of the forensic Document Examiner

- 2. The Theory of Handwriting Analysis
- 3. Comparing Handwriting samples in court room cases
- 4. Challenge to the Document Field
- 5. Typewriter and typewriting Examinations
- 6. Paper and Watermark Examinations

L. Chapter 23 Analysis of Controlled Substances

- 1. Standards and Scope of Analysis
- 2. Chemical Analysis
- 3. Quality Assurance Control of Testing
- 4. Clandestine Drug Laboratories

M. Chapter 25 Basic Fire and Explosion Investigation

- 1. The Behavior of Fire
- 2. Origins and Causes of Fire
- 3. Fatal Fire Investigations
- 4. Motor Vehicle Fires
- 5. Collection of fire Evidence

N. Chapter 28 Computer Crime and Electronic Crime Scene

- 1. Crime Scenes with Digital and Electronic Evidence
- 2. Legal Issues in the searching and Seizures of Computers

O. Chapter 31 Serial Offenders: Linking Cases by Modus Operandi and Signature

- 1. What is a Killers Signature?
- 2. Signature versus Modus Operandi

P. Chapter 32 Criminal Personality Profiling

- 1. Case Linkages for Serial Offenses
- 2. Search Warrant Application

Course Syllabi

- 3. Applications in Homicide Investigations
- Q. Chapter 33 Forensic Evidence
 - 1. Criminal Law Theory and Evidence

- 2. Forensic Evidence and the Crime Scene
- 3. Laboratory Matches and the Courtroom Rules of Evidence
- 4. Forensic Evidence Case Studies

Grade Scale

| 90 - 100 | A |
|----------|---|
| 80 - 89 | В |
| 70 - 79 | C |
| 60 - 69 | D |
| 0 - 59 | F |

Course Evaluation

Final grades will be calculated according to the following criteria:

| 1. 3 Unit Tests | 75% |
|-----------------------------|-----|
| 2. Comprehensive Final Exam | 15% |
| 3. Course Project | 10% |

Course Requirements

- 1. Satisfactory exam grades.
- 2. Satisfactory attendance.
- 3. Satisfactory preparation and presentation of report.

Course Policies

- 1. Proper classroom decorum must be maintained at all times.
- 2. No DISRUPTIONS will be tolerated and in this classroom, we will respect one another's right to learn.
- 3. No food, drinks, or use of tobacco products in class.
- 4. Cell phones, headphones, and any other electronic devices must be turned off while in class.
- 5. Do not bring children to class.
- 6. Do not walk out of class early without talking to me before the class begins.
- 7. ACADEMIC DISHONESTY WILL BE DEALT WITH MOST STRICTLY! An automatic F for the semester, plus a report will be filed.
- 8. On exam day, all desks MUST be clear except for exam materials. All purses, backpacks, notebooks, etc. should be stored under the desks including CELL PHONES.
- 9. No late assignments will be accepted.

Course Syllabi

- 10. Makeup exams will not be given, unless arranged for in advance. If you miss an exam (including the final) for any reason, without making arrangements with me prior to the exam, you will receive a zero on that exam.
- 11. Exams (including the final) will begin on time. If you are more than 5 minutes late for the exam, you will not be allowed to take it.
- 12. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.
- 13. Attendance is expected and required.
- 14. Additional class policies as defined by the individual course instructor.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course Schedule

| Week of | Topic | Reference |
|---------|--|--------------|
| Week 1 | Course Introduction and policies | |
| | Discussion of Syllabus | pp. 243-260 |
| | Chapter 13: The Forensic Laboratory | |
| Week 2 | Chapter 13: continued | pp. 261-284 |
| | Chapter 14: Identification of Blood and Blood Stains | |
| Week 3 | Chapter 15: Identification of Body Fluids | pp. 285-302 |
| Week 4 | Chapter 16: Forensic DNA: Technology Applications and the Law | pp. 303- 326 |
| | Review for Exam I (Chapters 13, 14, 15, 16,) | |
| Week 5 | Chapter 17. Microanalysis and Examination of Trace Evidence EXAM I | pp. 327-354 |
| Week 6 | Chapter 18: Fingerprints | pp.355-376 |
| | Practical Application Exercise | rritti |
| Week 7 | Chapter 19: Forensic Footwear Evidence | pp. 377-392 |

Course Syllabi

| | Practical Application Exercise | |
|---------|--|-------------|
| | Course Project: Evidence, Fingerprints and Footwear | |
| Week 8 | Chapter 20: Forensic Tire Tread and Tire Track Evidence Practical Application | pp. 393-406 |
| Week 9 | Chapter 21: Firearm and Tool Mark Examinations Practical Application Exam 2 Review (Chapters 17, 18, 19, 20) | pp. 407-438 |
| Week 10 | Chapter 22: Questioned documents Practical Application "real or fake" EXAM 2 | pp. 439-456 |
| Week 11 | Chapter 23: Analysis of Controlled Substances The Crime Lab and Illegal Drugs Meth Labs in East Texas | pp.457-488 |
| Week 12 | Chapter 25:Basic Fire and Explosion Investigation Exam 3 Review (Chapters 21, 22, 23, 25) | pp.507-526 |
| Week 13 | Chapter 28: Computer Crime and Electronic Crime Scene "Cyber Crime" EXAM 3 | pp. 569-584 |
| Week 14 | Chapter 31: Serial Offenders: Linking Cases by Modus Operandi and Signature | pp.617-626 |
| Week 15 | Chapter 32: Criminal Personality Profiling Class Investigative Profiling Discussion Chapter 33: Forensic Evidence pp. 649- 666 Review the Casey Anthony Trial Final Exam Review (Chapters 28,31,32,33) | pp.627- 648 |
| Week 16 | Final Exam | |

Contact Information:

Varies by Instructor