# **CRIMINALISTICS 1 CJSA 1308**

**Credit:** 3 semester credit hours (3 hours lecture)

### Prerequisite/Co-requisite: none

### **Course Description**

Introduction to the field of Criminalistics. Topics include the appreciation of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis

### **Required Textbook and Materials**

- Forensic Science Today by Dr. Henry C. Lee, George M. Taft and Kimberly A. Taylor. (Lawyers & Judges Publishing) 2<sup>nd</sup> Edition
  - a. ISBN number is 978-1-9-3326487-5

## **Course Objectives**

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

- 1. Describe the care required in identifying, collecting, and preserving evidence for scientific examination
- 2. Explain the significance of field and laboratory findings

## **Course Outline**

- A. Syllabus
  - 1. Introduction of Faculty and students
  - 2. Instructor Resume
  - 3. Comments
- B. Chapter 1
  - 1. Definitions
  - 2. The Scientific Method
  - Introduction to the world of Forensic Science and Criminalists
  - 4. The Forensic Pathologist
    - i. The Medical Legal Autopsy
    - ii. The Sexual Assault Nurse Expert
- C. Chapter 2 : Crime Scene
  - Investigation : The Basics / Part I
    - 1. The Crime Scene
    - 2. General Crime Scene Procedures

- 3. The Crime Scene Survey
- 4. How Evidence is Used
- 5. Documenting the Scene
- 6. Goals of the Crime Scene Investigator
- 7. Linkage
- 8. Locard's Theory
- 9. Methods of Search
- D. Chapter 3 : Crime Scene Physical Evidence / Part II
  - 1. What is Physical Evidence ?
  - 2. The Role of Physical Evidence
  - 3. Types of Evidence
  - 4. Classification of Physical Evidence
  - 5. The Collection of Evidence
  - 6. Chain of Custody
  - 7. The Logic Tree: Death Scenes

#### CJSA 1308

Course Syllabus

- 8. The Woodchipper Case by Dr. Henry Lee
- E. Chapter 4 : Fingerprinting
  - 1. Automated Fingerprint System (AFIS)
  - 2. Fingerprint Patterns
  - 3. How to Locate Prints on a Scene
  - 4. Methods of Visualizing Fingerprints
- F. Chapter 5 : Trace Evidence
  - 1. What is Trace Evidence?
  - 2. Investigating "glass" evidence
  - 3. Evidence on the Scene
  - 4. Hair Evidence on the Crime Scene
  - 5. Fiber Evidence on the Crime Scene
  - 6. The "Wayne Williams" Atlanta Child Killer Case Reference: Dr. Henry Lee
- G. Chapter 6 : Drug Evidence
  - 1. Types of Drug Evidence
  - 2. Collection of Blood and Urine in reference to Drug Cases
  - 3. Logic Tree: Drugs and Poisoning
  - 4. Investigating Clandestine Drug Labs
  - 5. Alcohol + Drugs = Death Exploring Famous Death Drug Cases
- H. Chapter 7 : Forensic Serology
  - 1. Defining serology
  - 2. Testing for Blood on the Crime Scene
  - 3. Is it Human or Animal Blood?
  - 4. The Collection of Blood on the Crime Scene
  - 5. "The House That Roared" Video Presentation – "The Blood Tells the Story..."
- I. Chapter 8 : DNA Evidence
  - 1. CODIS Data Base
  - 2. What is DNA?

- 3. Where is DNA Found?
- 4. How to Collect and Preserve DNA
- J. Chapter 9 : Blood stain Patterns
  - 1. What Do Blood Patterns Tell the scientific investigator?
  - 2. The Blood Patterns
  - 3. Blood Patterns to Know
  - 4. The Blood Pattern Study
  - 5. The Jodie Aries Murder Case
- K. Chapter 10: Questioned Documents
  - 1. Types of documents used as Evidence
  - 2. Collecting Evidence
  - 3. Sources of Authentic Handwriting Sample
  - 4. The Jon Benet Ramsey Murder Case
- L. Chapter 11 : Imprints and ImpressionsDefinitions
  - 1. Collecting and documenting the Evidence in these cases
  - 2. "In Cold Blood" Case
- M. Chapter 12 : Tool Marks and Firearm Evidence
  - 1. Types of Tool mark evidence
  - 2. The collection of tool mark evidence
  - 3. Documentation of Tool mark evidence
  - 4. Lab Analysis
  - 5. Anatomy of a gunshot
  - 6. Firearms Examination
  - 7. Guns Loaded or Unloaded
  - 8. Bullets and Spent Cartridge Cases
  - 9. Logic Tree : Shooting Scene
- 10. Gun Shot Residue (GSR)
- 11. "Shotgun Murder or Suicide. The William Greer Case"
- 12. Firearms cases of Dr. Henry Lee, Dr. Michael Baden and Lt. Vernon Gerberth NYPD

#### **Grade Scale**

90 - 100	А
80 - 89	В
70 - 79	С
60 - 69	D
0 – 59	F

#### **Course Evaluation**

Final grades will be calculated according to the following criteria:

1. Unit Tests	40%
2. Final Exam	20%
3. Course Project I "The Death Report" - The Cause and Manner of Death ( <i>The Scene</i> , <i>the Evidence</i> , <i>the Medical</i> <i>Legal Report</i> , <i>the Case</i> <i>Conclusion</i> )	15%
4. Course Project II The Crime Scene Search ( <i>Active</i> <i>Participation, An Individual</i> <i>Case Report /</i> <i>Supplemented with a Group</i> <i>Report</i> )	15%
5. In Class Individual/Group Exercises	10%

## **Course Policies**

- 1. No food, drinks, or use of tobacco products in class.
- 2. Computers, telephones, headphones, and any other electronic devices must be turned off while in class or used only with permission of the instructor.
- 3. Do not bring children to class.
- 4. 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.
- 5. Additional class policies as defined by the individual course instructor.

#### Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

https://help.blackboard.com/en-

us/Learn/9.1\_2014\_04/Student/015\_Browser\_Support/015\_Browser\_Support\_Policy\_A

functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

### **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. You may also visit the online resource at <a href="http://www.lit.edu/depts/stuserv/special/defaults.aspx">http://www.lit.edu/depts/stuserv/special/defaults.aspx</a>

### **Student Code of Conduct Statement**

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at <u>www.lit.edu</u> or obtained in print upon request at the Student Services Office. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document