

## **Saint Leo University**

### **CRM342**

#### **Evidence Collection and Preservation**

#### **Course Description:**

This course covers the methods associated with evidence collection and preservation of evidence. Upon successful completion, the student will be competent in the recording of the crime scene through photography and videotaping as one of the many methods of preserving evidence; the use of the many evidence development and recovery kits; the use of light energy to locate invisible trace materials; crime scene safety; the presentation of scientifically sound information in the courtroom; and the correct methods to collect questioned, known, and control samples related to hair standards, DNA, soil, fire debris, accelerants, and biological fluids.

#### **Prerequisite:**

CRM230, POL123, CRM220

#### **Textbooks:**

Fisher, B. A. J. and Fisher, D. R. (2012). *Techniques of crime scene investigation* (8th ed.). Boca Raton, FL: CRC Press. ISBN-13: 978-1-4398-1005-7

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author. ISBN-13: 978-1-4338-0561-5

#### **Required Materials:**

- Camera (film or digital)
- Criminalistics Kit – A Saint Leo Student Criminalistic Kit is required for this course. The Cost for the #CRM342 Kit is \$12.00 plus shipping. The Criminalistic Kit should be ordered online. Instructions for ordering can be found in Doc Sharing.

#### **Learning Outcomes:**

As a result of this course, students will:

1. Examine protocols and assess importance of collection and preservation of evidence.
2. Discuss approved methods of collecting crime scene evidence.
3. Identify types of evidence.
4. Demonstrate use of collection methods for crime scene evidence.
5. Analyze how to present evidence in a court room.
6. Employing appropriate alternate light source techniques to photograph evidence.
7. Demonstrate an understanding of the Saint Leo University core value of community as it relates to the collection and preservation of evidence at a crime scene.

#### **Core Value:**

*Community:* Saint Leo University develops hospitable Christian learning communities everywhere we serve. We foster a spirit of belonging, unity, and interdependence based on mutual trust and respect to create socially responsible environments that challenge all of us to listen, to learn, to change, and to serve.

#### **Topics Discussed**

- The preservation of crime scene evidence and the approved methods of collection, based on the nature of the evidence.
- Knowledge of proper collection and preservation methods for physical and biological evidence found at crime scenes by identifying types of evidence, demonstrating use of collection methods, and identifying how each type is preserved for future laboratory testing and courtroom presentation.
- The methodology of understanding the importance of evidence to courtroom cases and how proper collection and preservation is achieved. This includes being able to identify, collect, and

preserve in such a manner to determine what information each item can corroborate based on items such as body fluids, fabrics, fingerprints, firearms, drug specimens, glass, metals and tool marks, questioned documents, and others.

- The use of different types of light sources used in evidence detection and collection, while understanding how to use such sources. This will be accomplished by using appropriate alternate light source (ALS) techniques to photograph evidence such as fibers, arson materials, and impression evidence such as bite marks, tool marks, and indented writings.

#### **Evaluation:**

Grades will be based on the following:

<b>Assignment</b>	<b>% of total grade</b>
Exams (4)	40%
Discussions (8)	24%
Practical Experiments (4)	20%
Research Project	16%
<b>Total</b>	<b>100%</b>

#### **Grading Scale:**

<b>Grade</b>	<b>Score (%)</b>
A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	60-66
F	0-59

#### **Written Assignments and the APA Format:**

The Department of Criminal Justice recognizes the value of excellence in writing for students in Criminal Justice. In part, each professor is expected to provide guidance on improving a student's writing skills. Students are required to use only the APA (American Psychological Association) format to write and develop a scholarly paper for submission in the Social Sciences. APA has been adopted by the Department as its writing standard for all academic written assignments. No other writing style is acceptable.

APA is the American Psychological Association, and the style is one of many in the academic world used to regulate the language, citations, procedure, and formatting of manuscripts and other examples of writing in the social sciences. Please be consistent throughout each written paper. *Refer to APA Guide under Resources on the Course Menu for APA specifics.*

All projects, assignments, or papers submitted for grading will be required to include an abstract and reference page. All references are to be cited using the American Psychology Association (APA) format (6<sup>th</sup> edition). Other formats will not be accepted. For each scholarly paper and group assignment(s), the work will be assessed using an individual grading rubric for each assignment. This tool and process helps the students identify and professor measure the key points necessary to successfully complete written or group assignments. *Wikipedia is not an appropriate source for any scholarly writing and is not permitted for any assignment in this program.*

## Course Schedule:

### Module 1                      Course Overview: Photography and Videography Preservation Techniques

#### Outcomes:

#### When you complete this module, you should be able to:

- Examine the value of physical evidence collection techniques.
- Analyze the best methods for capturing photographic evidence.
- Differentiate between photographic and video evidence, both in the field and in the courtroom.

#### Assignments:

Items to Be Completed:	Due No Later Than:
Post an introduction to the class	Thursday 11:59 PM EST/EDT
Read textbook Chapters 1 and 5	
Read the assigned articles	
Review the Key Concepts	
Read "Verifying and Evaluating Online Sources"	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Research Project preferences	Sunday 11:59 PM EST/EDT

### Module 2                      Collection Methods of Crime Scene Evidence: Non-Destructive Methods

#### Outcomes:

#### When you complete this module, you should be able to:

- Compare the benefits of sketching crime scenes to photography methods.
- Assess the fiscal benefits of sketching and how this method can be enhanced.
- Formulate an opinion on the use of non-destructive evidence preservation and collection methods as they apply to crime scene investigation.

#### Assignments:

Items to Be Completed:	Due No Later Than:
Read textbook Chapter 3	
Read assigned articles	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Complete Practical Experiment A	Sunday 11:59 PM EST/EDT
Submit project topic	Sunday 11:59 PM EST/EDT
Complete Exam 1	Sunday 11:59 PM EST/EDT

### **Module 3                      Collection Methods of Crime Scene Evidence: Trace Physical Evidence**

#### **Outcomes:**

#### **When you complete this module, you should be able to:**

- Assess the value and importance of trace evidence collection methods.
- Recognize types of trace evidence which should be collected and preserved.
- Develop a strategy for collecting and preserving trace evidence found during a crime scene investigation.

#### **Assignments:**

<b>Items to Be Completed:</b>	<b>Due No Later Than:</b>
Read textbook Chapters 7 and 11	
Read the assigned article	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Practical Experiment B	Sunday 11:59 PM EST/EDT

### **Module 4                      Collection Methods of Crime Scene Evidence: Biological Evidence**

#### **Outcomes:**

#### **When you complete this module, you should be able to:**

- Assess the value and importance of biological evidence collection and preservation methods.
- Recognize the types of biological evidence that is often collected at crime scenes.
- Formulate a method for carefully processing evidence with biological material and understand why this outline should be followed.

#### **Assignments:**

<b>Items to Be Completed:</b>	<b>Due No Later Than:</b>
Read textbook Chapter 8, Chapter 13 (pp. 333-336 and 339-340), and Chapter 16 (specifically concentrating on pp. 383-388)	
Read the assigned articles	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Complete Exam 2	Sunday 11:59 PM EST/EDT

## Module 5                      Use of Light Energy for Location of Evidence

### Outcomes:

#### When you complete this module, you should be able to:

- Assess the value and importance of utilizing light energy and alternate light sources for evidence collection and preservation methods.
- Recognize the types of light energy and alternate light sources often used by personnel at crime scenes.
- Formulate a method for safely using light energy to recover, detect, and collect crime scene evidence.

### Assignments:

Items to Be Completed:	Due No Later Than:
Read textbook Chapter 6 (pp. 115-117)	
Read the assigned articles	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Submit Practical Experiment C	Sunday 11:59 PM EST/EDT

## Module 6                      Crime Scene Safety: Personnel and Evidence Protection

### Outcomes:

#### When you complete this module, you should be able to:

- Distinguish among the many types of hazards found at a crime scene.
- Propose solutions to prevent the contamination and cross-contamination of evidence as well as proposing solutions for protecting the evidence and the investigator.
- Recommend methods for preserving the evidence while guarding against hazardous situations.

### Assignments:

Items to Be Completed:	Due No Later Than:
Read textbook Chapter 4 (pp. 75-76) and Chapter 8 (specifically pp. 193-194)	
Read the FBI <i>Handbook of Forensic Services</i> , pp.147-170	
Read the Assigned articles	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Complete Exam 3	Sunday 11:59 PM EST/EDT
Research Project	Sunday 11:59 PM EST/EDT

## Module 7 Evidence Preservation and Lab Collection Standards

### Outcomes:

#### When you complete this module, you should be able to:

- Assess the value and importance of proper evidence preservation techniques for lab analysis.
- Recognize the types of evidence collected for analysis and evaluate how much of a sample is required.
- Prioritize methods of evidence collection and preservation for crime lab analysis and reporting.

### Assignments:

Items to Be Completed:	Due No Later Than:
Read textbook Chapter 5 (pp. 96-99), Chapter 10, and Chapter 11 (p. 285)	
Read the <i>FBI Handbook of Forensic Services</i> (see Reading page for details)	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Complete Practical Experiment D	Sunday 11:59 PM EST/EDT

## Module 8 Ethics of Evidence Collection and Preservation and End of Course Review

### Outcomes:

#### When you complete this module, you should be able to:

- Distinguish among the many types of hazards and evidence found at a crime scene.
- Support ethical and moral balance in job integrity by respecting the evidence and seeking to preserve its inherent value as evidence at a scene.
- Recommend the specific method of preserving and collecting evidence found at a crime scene based on the physical evidence.

### Assignments:

Items to Be Completed:	Due No Later Than:
Read all assigned textbook chapters and specific pages, FBI Handbook of Forensic Services material, and all articles	
Review the Key Concepts	
Post an initial response to the discussion question	Thursday 11:59 PM EST/EDT
Post responses to at least two classmates	Sunday 11:59 PM EST/EDT
Complete Exam 4	Sunday 11:59 PM EST/EDT