

**Physical Forensic Sciences Laboratory**  
**FS 333L**  
**Spring 2014**

**Instructor:** Nick Harrison  
**Contact:** nicholas.harrison@chaminade.edu  
**Office:** Henry Hall 3  
**Office Hours:** MWF 0900-1000, TTh 0900-1030, or by appointment

**Time:** 1430-1720  
**Days:** Monday  
**Room:** Henry Lab 6

This course is designed to survey the various subdisciplines in the physical forensic sciences, expanding on the topics covered in FS 330 by introducing practical, hands-on exercises. The class will consist of a combination of lectures and laboratory exercises that will allow students to recognize, analyze, and interpret various forms of physical evidence while exploring underlying theory, protocols, and relevance to investigations. Prerequisites: EN 102, COM 101, BI 203/L or BI 205/L, BI 204/L or BI 206/L, FS 330 or CJ 220.

**OBJECTIVES:**

Upon completion of this course, students will have gained hands-on experience with techniques from various forensic disciplines and will be able to:

1. Recognize various forms of physical evidence
2. Determine how to preserve that evidence
3. Understand the protocols for processing various types of evidence
4. Distinguish between what can and cannot be accomplished with regard to analyses

**TEXT:**

James SH, Nordby JJ. Forensic science: an introduction to scientific and investigative techniques. 3rd ed. Boca Raton: CRC Press; 2009. 757 p. ISBN: 978-1-4200-6493-3

This book is required for the course and reading it is your responsibility. Material from this text will be used for both lecture examination and laboratory purposes.

**ATTENDANCE:**

Since you will be submitting assignments at the end of each laboratory session for credit towards your final grade, attending class is highly advised. No points will be awarded for unsubmitted assignments, obviously, and you will not be able to complete the assignments if you are not in class. Under extenuating/emergency circumstances, absences may be excused if documentation is provided or if approved prior to the class period. In such cases, I will do my best to accommodate alternate arrangements for completing assignments, but I can make NO GUARANTEES. Repeated absences will be reported to counseling and will result in possible removal from the course as per the CUH Student Handbook.

\*\*\*Syllabus is subject to change at the instructor's discretion\*\*\*

## **CELL PHONES AND MUSIC DEVICES:**

Unless specifically permitted by your instructor, use of cell phones and music devices is prohibited during all Natural Science and Mathematics classes at Chaminade, as it is discourteous and may lead to suspicion of academic misconduct. I would ask that cell phones be either turned off or put on silent mode while in the classroom. I am not necessarily opposed to you periodically checking your phone as long as it is not disruptive to your fellow classmates or me. If it becomes disruptive, I will ask you to turn off your phone. Students unable to comply with the instructor's requests will be asked to leave class. Use of cell phones is strictly prohibited during examinations.

## **ADA ACCOMMODATIONS:**

Students with special needs who meet the criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Counseling Center (Dr. June Yasuhara, 735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations. Please refer any questions to the Dean of Students and review procedures at [www.chaminade.edu/student\\_life/sss/counseling\\_services.php](http://www.chaminade.edu/student_life/sss/counseling_services.php)

## **COMPUTERS:**

The use of computers in this class is encouraged, provided they are used for the class. Doing other things on the computer such as other class work or surfing the internet is not acceptable.

## **DRESS CODE:**

This course is conducted in a laboratory. The following dress code and rules apply while in the lab:

1. Closed-toe shoes
2. Lab coat when performing hands-on exercises
3. Safety glasses/gloves when instructed
4. No eating, drinking, or gum chewing.

## **GRADING:**

Final grades for the course will be totaled using the following weighting:

Laboratory Assignments: 33%

Midterm Exam 1: 20%

Midterm Exam 2: 20%

Final Exam: 27%

\*\*\*Syllabus is subject to change at the instructor's discretion\*\*\*

## GRADING SCALE:

90 - 100% A  
80 - <90% B  
70 - <80% C  
60 - <70% D  
<60% F

Numerical grades containing decimal points **will not** be rounded up during the conversion to letter grades.

## SCHEDULE:

- Jan 13: Introduction to the class & syllabus  
The Forensic Scientist [Chapter 1] and Forensic Laboratory [Chapter 13]  
Forensic Pathology [Chapter 2]  
[Video - The Autopsy, Chapter One: Unraveling Life's Mysteries](#)  
[Exercise – Virtual Autopsy](#)
- Jan 20: **NO CLASS (Martin Luther King, Jr. Day)**
- Jan 27: Investigation of Traumatic Deaths [Chapter 4]  
[Exercise – Traumatic Deaths](#)
- Feb 3: [Guest Lecturer – Forensic Anthropology \[Chapter 7\]](#)  
[Exercise – Forensic Anthropology](#)
- Feb 10: **MIDTERM EXAM #1**
- Feb 17: **NO CLASS (Presidents' Day)**
- Feb 24: Crime Scene Investigation [Chapter 10]  
[Exercise – Collection and Preservation of Evidence](#)
- Mar 3: Recognition of Bloodstain Patterns [Chapter 12]  
[Exercise – Bloodstain Pattern Analysis](#)
- Mar 10: [Guest Lecturer – Microanalysis and Trace Evidence \[Chapter 17\]](#)  
[Exercise – Examination of Trace Evidence](#)
- Mar 17: **MIDTERM EXAM #2**
- Mar 24: **NO CLASS (Spring Recess)**

\*\*\*Syllabus is subject to change at the instructor's discretion\*\*\*

- Mar 31: Fingerprints [Chapter 18]  
Exercise – Inked and Latent Fingerprints  
Exercise – Fingerprint Comparisons
- Apr 7: Footwear Evidence [Chapter 19]  
Exercise – Footwear Impression Preservation and Comparison
- Apr 14: Firearms and Tool Mark Examinations [Chapter 21]  
Exercise – Firearms and Tool Marks
- Apr 21: Guest Lecturer – Questioned Documents [Chapter 22]  
Exercise – Questioned Document Examination
- Apr 28: **FINAL EXAM**

\*Guest lectures are subject to change/cancellation depending on availability of the guest\*

\*\*\*Syllabus is subject to change at the instructor's discretion\*\*\*