

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

**Instructor:** Nick Harrison  
**Contact:** nicholas.harrison@chaminade.edu  
**Office:** Henry Hall 3  
**Office Hours:** MWF 0900-1000, T 0900-1200, 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 230/330 or CJ 220 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: BI 206/L and FS 230, 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, Bell S. Forensic science: an introduction to scientific and investigative techniques. 4th ed. Boca Raton: CRC Press; 2014. 614 p. ISBN: 978-1-4398-5383-2

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: 50%  
Midterm Exam #1: 15%  
Midterm Exam #2: 15%  
Final Exam: 20%

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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:**

Aug 25 Course Introduction and Syllabus  
The Forensic Scientist and The Forensic Laboratory [Chapter 1]  
Forensic Pathology [Chapter 5.1-5.4]  
[Video - The Autopsy, Chapter One: Unraveling Life's Mysteries](#)  
[Exercise – Virtual Autopsy](#)

Sept 1: **NO CLASS (Labor Day)**

Sept 8: Investigation of Traumatic Deaths [Chapter 5.5]  
[Field Trip - Medical Examiner Facility](#)  
or  
[Exercise – Traumatic Deaths](#)

Sept 15: Crime Scene Investigation [Chapter 3]  
[Exercise – Collection and Preservation of Evidence](#)

Sept 22: **MIDTERM EXAM #1**

Sept 29: Recognition of Bloodstain Patterns [Chapter 4]  
[Exercise – Bloodstain Pattern Analysis](#)

Oct 6: [Guest Lecturer – Forensic Anthropology \[Chapter 6\]](#)  
[Exercise – Forensic Anthropology](#)

Oct 13: **NO CLASS (Discoverers' Day)**

Oct 20: [Guest Lecturer – Microanalysis and Trace Evidence \[Chapter 16\]](#)  
[Exercise – Examination of Trace Evidence](#)

Oct 27: **MIDTERM EXAM #2**

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- Nov 3:           Fingerprints [Chapter 13]  
                  Exercise – Inked and Latent Fingerprints  
                  Exercise – Fingerprint Comparisons
- Nov 10:          Firearms and Tool Mark Examinations [Chapter 14]  
                  Exercise – Firearms and Tool Marks
- Nov 17:          Footwear Evidence [Chapter 15.1]  
                  Exercise – Footwear Impression Preservation and Comparison
- Nov 24:          Guest Lecturer – Questioned Documents [Chapter 17]  
                  Exercise – Questioned Document Examination
- Dec 1:           **FINAL EXAM**

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

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