Physical Forensic Sciences Laboratory
FS 333L
Spring 2015

Instructor: Nick Harrison
Contact: nicholas.harrison@chaminade.edu
Office: Henry Hall 3
Time: 1430-1720
Days: Monday
Room: Henry Lab 6
Office Hours: MWF 0900-1000, TTh 0900-1030, or by appointment

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 216/L, 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.

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

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%

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 24: 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

Aug 31: Investigation of Traumatic Deaths [Chapter 5.5]
Exercise – Traumatic Deaths

Sept 7: **NO CLASS (Labor Day)**

Sept 14: Crime Scene Investigation [Chapter 3]
Exercise – Collection and Preservation of Evidence

Sept 21: **MIDTERM EXAM #1**

Sept 28: Bloodstain Patterns [Chapter 4]
Exercise – Bloodstain Pattern Analysis

Oct 5: Guest Lecturer – Forensic Anthropology [Chapter 6]
Exercise – Forensic Anthropology

Oct 12: **NO CLASS (Discoverers' Day)**

Oct 19: Microanalysis and Trace Evidence [Chapter 16]
Exercise – Examination of Trace Evidence

Syllabus is subject to change at the instructor's discretion

Oct 26: **MIDTERM EXAM #2**

Nov 2: Fingerprints [Chapter 13]
Exercise – Inked and Latent Fingerprints
Exercise – Fingerprint Comparisons

Nov 9: Firearms and Tool Mark Examinations [Chapter 14]
Exercise – Firearms and Tool Marks

Nov 16: Footwear Evidence [Chapter 15.1]
Exercise – Footwear Impression Preservation and Comparison

Nov 23: Guest Lecturer – Questioned Documents [Chapter 17]
Exercise – Questioned Document Examination

Nov 30: **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