

Fingerprint Analysis
FS 480-01-1 / FS 642
Fall 2016

Instructor: Nick Harrison	Time: 1300-1420
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Office Hours: MWF 0900-1000, TTh 0900-1030, or by appointment	

This is an undergraduate/graduate-level course designed to encompass numerous aspects of fingerprint science including history, friction ridge skin anatomy, latent print processing techniques, fingerprint comparisons, report writing, and courtroom preparation. It must be taken concurrently with FS 480L-01-1 / FS 642L, the Fingerprint Analysis Laboratory course.

OBJECTIVES:

Upon completion of this course and the accompanying laboratory, students will be able to:

1. Describe the biological origin and makeup of fingerprints
2. Obtain known prints from living and deceased persons
3. Visualize and recover latent prints using both physical and chemical methods
4. Properly document latent fingerprints and subsequent comparisons
5. Conduct latent print comparisons
6. Operate an Automated Fingerprint Identification System
7. Produce demonstrative exhibits for court

TEXT:

Option 1: Daluz, H. Fundamentals of fingerprint analysis. Boca Raton: CRC Press; 2014. 340 p. ISBN-13: 978-1466597976

Option 2: Scientific Working Group on Friction Ridge Analysis, Study and Technology (SWGFAST) et al. The Fingerprint sourcebook [Internet]. Washington (DC): National Institute of Justice; 2011 [cited 2014 Jan 11].

ISBN-13: 978-1477664766. Available from

<http://www.nij.gov/publications/pages/publication-detail.aspx?ncjnumber=225320>

These books are essential for the course and reading (at least one of) them is your responsibility. Material from these texts will be used for both lecture examination and laboratory purposes.

Syllabus is subject to change at the instructor's discretion

ATTENDANCE:

Students are expected to be in class and to be on time. Repeated absences will be reported to counseling and will result in possible removal from the course, as per the Chaminade 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.

ASSIGNMENTS / GRADING:

Five fingerprint analysis/comparison assignments will be issued throughout the semester. These assignments are intended to be completed during the laboratory periods or outside of class.

There will be two written midterm examinations.

Graduate students only are also required to write a term paper, which is due the final week of classes (Dec 1). Details to be discussed in class.

Syllabus is subject to change at the instructor's discretion

Final grades for the lecture course will be determined as follows:

Graduate Students

Assignments: 25%
Midterm Exam #1: 25%
Midterm Exam #2: 25%
Term Paper: 25%

Undergraduate Students

Assignments: 34%
Midterm Exam #1: 33%
Midterm Exam #2: 33%

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:

note: 1st/black set of chapters = required text; 2nd/blue set of chapters = optional text

Aug 23: Course Introduction and Syllabus
Aug 25: History [Chapter 2] [Chapter 1]
Aug 30: Fingerprint Processing Techniques (Part 1) [Chapter 6, Chapter 8, Chapter 10] [Chapter 7, Chapter 8]
Sept 1: Fingerprint Processing Techniques (Part 2) [Chapter 12]
Sept 6: Fingerprint Processing Techniques (Part 3) [Chapter 11, Chapter 13]

Term Paper Topics Available

Sept 8: Alternate Light Sources and Photography [Chapter 9] [Chapter 7.10, Chapter 8.5.3]
Sept 13: Recording Friction Ridge Exemplars [Chapter 5] [Chapter 4]
Sept 15: Anatomy and Morphology of Friction Ridge Skin [Chapter 3] [Chapter 2, Chapter 3]

Syllabus is subject to change at the instructor's discretion

Sept 20: Fingerprint Pattern Classification [Chapter 4] [[Chapter 5](#)]

Sept 22: Review

Sept 27: **MIDTERM EXAM #1 [Aug 25 - Sept 15]**

Sept 29: ACE-V and Fingerprint Comparisons (Part 1) [Chapter 16] [[Chapter 9](#)]

Oct 4: ACE-V and Fingerprint Comparisons (Part 2)

Oct 6: ACE-V and Fingerprint Comparisons (Part 3)

Oct 11: Smart Searching: Comparison Time Savers

Oct 13: Palm Prints [Chapter 17]

Oct 18: Palm Print Orientation Exercise

Oct 20: Palm Print Orientation Exercise (continued)

Oct 25: Review

Oct 27: **MIDTERM EXAM #2 [Sept 20 - Oct 13]**

Nov 1: Documentation of Friction Ridge Impressions [Chapter 14] [[Chapter 10](#)]
Automated Fingerprint Identification Systems [Chapter 7] [[Chapter 6](#)]

Nov 3: Automated Biometric Identification System (ABIS) Enrollment

Nov 8: ABIS Instruction

Nov 10: ABIS Instruction

Nov 15: Courtroom Display / Charted Enlargement

Nov 17: Courtroom Display / Charted Enlargement

Nov 22: Report Writing / FS642L Practical Examination

Nov 24: **NO CLASS (Thanksgiving)**

Nov 29: FS642L Practical Examination

Dec 1: FS642L Practical Examination
TERM PAPER DUE

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