# Fingerprint Analysis FS 642 Fall 2015

**Instructor:** Nick Harrison **Time:** 1300-1420

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Office: Henry Hall 3 Room: Henry 203

Office Hours: MWF 0900-1000, TTh 0900-1030, or by appointment

This is a 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 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:

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

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.

## Optional (Recommended) Text:

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

<sup>\*\*\*</sup>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

Students are also required to write a term paper, which is due the penultimate week of classes (Nov 24). Details to be discussed in class.

In addition, there will be two written midterm examinations.

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

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

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

Term Paper: 25%

## 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 25: Course Introduction and Syllabus

Aug 27: History [Chapter 2] [Chapter 1]

Sept 1: Fingerprint Processing Techniques (Part 1) [Chapter 6, Chapter 8, Chapter

10] [Chapter 7, Chapter 8]

Sept 3: Fingerprint Processing Techniques (Part 2) [Chapter 12]

Sept 8: Fingerprint Processing Techniques (Part 3) [Chapter 11, Chapter 13]

**Term Paper Topics Available** 

Sept 10: Alternate Light Sources and Photography [Chapter 9] [Chapter 7.10,

Chapter 8.5.3]

Sept 15: Recording Friction Ridge Exemplars [Chapter 5] [Chapter 4]

Sept 17: Anatomy and Morphology of Friction Ridge Skin [Chapter 3] [Chapter 2,

Chapter 3]

Sept 22: Fingerprint Pattern Classification [Chapter 4] [Chapter 5]

Sept 24: Review

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Sept 29: MIDTERM EXAM #1 [Aug 27 - Sept 17]

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

Oct 6: ACE-V and Fingerprint Comparisons (Part 2)

Oct 8: ACE-V and Fingerprint Comparisons (Part 3)

Oct 13: Smart Searching: Comparison Time Savers

Oct 15: Palm Prints [Chapter 17]

Oct 20: Palm Print Orientation Exercise

Oct 22: Palm Print Orientation Exercise (continued)

Oct 27: Review

Oct 29: MIDTERM EXAM #2 [Sept 22 - Oct 15]

Nov 3: Documentation of Friction Ridge Impressions [Chapter 14] [Chapter 10]

Automated Fingerprint Identification Systems [Chapter 7] [Chapter 6]

Nov 5: ABIS Enrollment

Nov 10: ABIS Instruction

Nov 12: ABIS Instruction

Nov 17: Courtroom Display / Charted Enlargement

Nov 19: Courtroom Display / Charted Enlargement

Nov 24: Report Writing / FS642L Practical Examination

**TERM PAPER DUE** 

Nov 26: **NO CLASS (Thanksgiving)** 

Dec 1: FS642L Practical Examination

Dec 3: FS642L Practical Examination

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