

Fingerprint Analysis
FS 642
Spring 2014

Instructor: Nick Harrison
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Office: Henry Hall 3
Office Hours: MWF 0900-1000, TTh 0900-1030, or by appointment

Time: 1100-1220
Days: TTh
Room: Henry Lab 5

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. Prerequisites: BI 203, BI 204.

OBJECTIVES:

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

1. Understand the 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:

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

ISBN-10: 1477664769
ISBN-13: 978-1477664766

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:

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.

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

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 (April 24). Details to be discussed in class.

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

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

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 14: Course Introduction and Syllabus
Jan 16: History [Chapter 1]
Jan 21: Fingerprint Processing Techniques [Chapter 7, Chapter 8]
Jan 23: Fingerprint Processing Techniques
Jan 28: Fingerprint Processing Techniques

Term Paper Topics Available

Jan 30: Alternate Light Sources [Chapter 8.5.3]
Feb 4: Recording Friction Ridge Exemplars [Chapter 4]
Feb 6: Anatomy and Morphology of Friction Ridge Skin [Chapter 2, Chapter 3]
Feb 11: Fingerprint Pattern Classification [Chapter 5]
Feb 13: Review
Feb 18: **MIDTERM EXAM #1 [Jan 16 - Feb 6]**
Feb 20: ACE-V, Latent Print Comparisons - Level 1 Detail, Level 2 Detail / Practice [Chapter 9]
Feb 25: Latent Print Comparisons - Level 3 Detail / Practice
Feb 27: Latent Print Comparisons - Practice

Syllabus is subject to change at the instructor's discretion

Mar 4: Search Smart Techniques

Mar 6: Palm Print Orientation and Comparisons

Mar 11: Palm Print Orientation and Comparisons

Mar 13: Documentation of Friction Ridge Impressions [Chapter 10]

Mar 18: Review

Mar 20: **MIDTERM EXAM #2 [Feb 11 - Mar 13]**

Mar 25: **NO CLASS (Spring Recess)**

Mar 27: **NO CLASS (Spring Recess)**

Apr 1: Automated Fingerprint Identification Systems [Chapter 6], ABIS Enrollment

Apr 3: ABIS Instruction

Apr 8: ABIS Instruction

Apr 10: Courtroom Display / Charted Enlargement

Apr 15: Courtroom Display / Charted Enlargement

Apr 17: Courtroom Display / Charted Enlargement

Apr 22: Report Writing

Apr 24: FS642L Practical Examination

TERM PAPER DUE

Apr 29: FS642L Practical Examination

May 1: FS642L Practical Examination

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