GROSSMONT COLLEGE

Official Course Outline

# ADMINISTRATION OF JUSTICE 254 – ADVANCED FINGERPRINT IDENTIFICATION

1. Course Number Course Title Semester Units Semester Hours

AOJ 254 Advanced 3 2 hours lecture: 32-36 hours Fingerprint Identification 3 hours lab: 48-54 hours

64-72 outside-of-class hours

for lecture

144-162 total hours

2. Course Prerequisites

A “C” grade or higher in AOJ 148 or equivalent

Corequisite

None

Recommended Preparation

None.

3. Catalog Description

This course covers analyses, comparison and evaluation of friction ridge skin with emphasis on individualization of finger and palm prints including learning the topography of palms and soles. This course would be of benefit to criminal investigators, and those who are interested in forensic identification. Students will learn methods and procedures for developing and preserving visible and latent crime scene impressions. Students will be expected to demonstrate proficiency in identification of finger and palm prints.

4. Course Objectives

The student will:

1. Demonstrate proper lab safety protocol and the use of Material Safety Data Sheets.
2. Determine if porous or nonporous surfaces contain latent prints by applying the best method to recover latent prints.
3. Demonstrate a thorough knowledge of sequential processing of both porous and nonporous surfaces.
4. Explain the philosophy of Ridgeology.
5. Interpret the qualitative and quantitative aspects of fingerprints, and any ambiguities to characteristics used by the automated latent print systems or in a comparison examination.
6. Identify correctly the hand and finger order of simultaneous fingerprints and analyze friction skin impressions for legibility and orientation.
7. Formulate an opinion as to the source of unknown latent impressions when compared to known inked impressions, using the scientific methodology ACE-v Methodology (analysis, comparison, evaluation).
8. Demonstrate the ability to accurately interpret the minutiae of fingerprint and palm impressions and identify right or left hands.
9. Identify and classify:

1) Palmar, thenar and hypothenar zones.

2) Triradii and volar patterns.

3) Flexion creases and metacarpo-phalangeal creases and pads.

j. Demonstrate knowledge of the components of the Automated Fingerprint Identification Systems (AFIS) and the ability to navigate a cold fingerprint search.

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5. Instructional Facilities

a**.** Standard classroom for lecture.

1. Fingerprint lab including:

i) tabletops

ii) fume hood

iii) eyewash station

iv) personal protective equipment

v) fingerprint processing equipment

vi) magnifiers and ridge counters.

6. Special Materials Required of Student

None

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7. Course Content

1. Philosophy and methodology of friction ridge skin identification, classification, and individualization.
2. Physical and chemical techniques for developing friction ridge skin impressions.
3. Use of computer databases in matching known and unknown prints.
4. Classification and individualization of inked footprint exemplars

8. Method of Instruction

1. Lecture.
2. Demonstrations.
3. Field trips such as crime laboratory tours.
4. Laboratory activities.

9. Methods of Evaluating Student Performance

1. Exams including a comprehensive written final exam, which measure students’ knowledge in fingerprint analysis.
2. Completed case brief.
3. Hands-on evaluation in the laboratory.
4. Writing assignments such as narrative lab reports that measure the students’ knowledge in fingerprint analysis and comparisons.
5. Final project with interview panel.

10. Outside Class Assignments

a. Finalproject~~s~~.

b. Class notebook of laboratory reports**.**

c. Students will be required to read text and supplementary materials.

d. Written assignments such as narrative lab reports that measure the students’ knowledge in fingerprint analysis and comparisons.

11. Texts

a. Required Text(s):

1) Champod, Cristophe, et.al, *Fingerprints and Other Ridge Impressions.* Boca Raton: CRC Press, 2016.

b. Recommended Text(s):

1) Coppock, Craig A. *Contrast: An Investigator’s Basic Reference Guide to Fingerprint Identification Concepts.* Springfield, IL: Charles C. Thomas Publisher, 2001.

2) Margot, Pierre & Lennard, Chris*, Fingerprint Detection Techniques.* Boca Raton: CRC Press, 2004.

c. Supplementary texts and workbooks:

None.

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Addendum: Student Learning Outcomes

Upon completion of this course, our students will be able to do the following:

a. Explain why friction ridges are permanent and unique.

b. Explain the comparison method for identifying fingerprints (ACE-V).

c. Develop latent fingerprints on a particular surface.

d. Identify the proper latent print sequential processing techniques for a particular evidence item.

Date approved by the Governing Board: December 13, 2019