

120/160:451 - Forensic Pattern Evidence

Primary Instructor: Kimberlee Moran, MSc, RPA (k.moran@camden.rutgers.edu; SCI302; 856-203-0687)

Wk	Date	Time	Subject	Speaker
1	Sept 6	Anytime	Welcome; Course Overview (virtual)	Prof. Moran
2	Sept 13	6-7pm 7-8pm 8-8.30pm	Pattern evidence basics The problem with patterns Students choose a patterns group	Prof. Moran
3	Sept 20	6 – 8pm	Forensic science standards for Pattern evidence Watch “The Basics of Error Rates in Pattern Evidence”	Heidi Eldridge, RTI International
<p>Due Sept 25 – One page reaction paper to the video. Submit via Sakai.</p>				
4	Sept 27	6-8pm	History & Development of Fingerprinting	Dr. Daniel Asen, Rutgers-Newark
5	Oct 4	6-6.30pm 6.30-7.30p 7.30-8.30p	Fingerprint Group presents Fingerprint comparison review Comparison exercise	Prof. Moran
6	Oct 11	6-7pm 7-8.30pm	Advanced chemical enhancement of fingerprints Chemical enhancement exercise	Prof. Moran
<p>Due Oct 16 – Mid-term lab notebooks due. Notebooks will be return by Oct 25th.</p>				
7	Oct 18	6-6.30pm 6.30-8pm	Questioned documents Group presents Questioned documents	Jillian Fesolovich, Keystone College

8	Oct 25	6-6.30pm 6.30-7.30p 7.30-8.30p	Footwear Group presents Foot wear Foot wear exercise	Prof. Moran
9	Nov 1	6-6.30pm 6.30-7.30p 7.30-8.30p	Tire mark Group presents Tire marks Tire mark exercise	Prof. Moran
10	Nov 8	6-6.30pm 6.30-7.30p 7.30-8.30p	Tool mark Group presents Tool mark basics Tool mark exercise	Prof. Moran
11	Nov 15	6-6.30pm 6.30-7.30p 7.30-8.30p	Fire arms Group presents Fire arms evidence Firearms exercise	Prof. Moran
12	Nov 29	6-7.30pm 7.30-8.30p	Glass & hair patterns Glass exercises	Prof. Moran
13	Dec 6	6-6.30pm 6.30-7.30p 7.30-8.30p	BPA Group presents Blood spatter / Blood stain analysis Blood spatter basics	Prof. Moran
14	Dec 13	6-7pm 7-8.30pm	Blood spatter – distance, angles, velocity Surface variation and distances exercise	Prof. Moran
Due Dec 15 – Final Lab Notebooks.				

Forensic Pattern Evidence (120/160:451) – Fall 2017

ADDITIONAL INFORMATION FOR STUDENTS

All sessions will be held in XXX unless otherwise informed.

I. Teaching Faculty:

Kimberlee Moran, MSc, RPA

Associate Teaching Professor & Director of Forensics

SCI 302

Telephone: 856-225-6156

E-Mail: k.moran@camden.rutgers.edu

II. Class Description:

This lecture/laboratory based course will provide students with an overview of the principles and concepts on which pattern evidence analysis is based. Methods of analysis for various types of forensic pattern evidence including fingerprints, footwear impressions, tire marks, tool marks, blood spatter analysis and fired bullets and cartridges will be discussed. Students will use mechanical, chemical, and visual techniques to develop and analyze these types of pattern evidence.

III. Textbooks:

There is no textbook for this course. All readings will be posted on Sakai either under "Resources" or as an announcement. It is essential that you check your Rutgers e-mail as all course announcements will be sent there.

IV. Educational Objectives:

By the end of this course, students will:

- Be familiarize with each of the pattern evidence fields;
- Understand and be able to perform methods of pattern analysis;
- Understand and articulate the limits of pattern evidence;
- Be able to discuss the future of pattern analysis.

V. Class Participation:

Participation in each class by the student is crucial to exemplify the student's understanding of the material. Each student is expected to read any assigned material in advance and come to each class prepared to discuss the topic. Where possible, students will be allocated reading material prior to class. This information will be disseminated via Sakai.

VI. Assessment:

The assessment for this course consists of **five** components each contributing to the final grade as outlined below. The taught material will be assessed as follows:

1. **Reaction Paper (Due Sept 25):** We will be a video that discusses some of the issues happening within pattern analysis. Students will write a one-page, single-spaced reaction to the video. Submit papers via Sakai.

2. **Class presentations:** Students will work in small groups to prepare a presentation on one type of pattern evidence (fingerprints, questioned documents, fire arms evidence, tool marks, footwear, tire marks, & blood spatter). Presentations should cover current standards or guidelines for practice, professional association, training for practitioners, and any new technology for the field. The presentation will be given as the topic comes up in class. Please submit the slides you will show in class to Sakai.
3. **Lab notebooks (mid-term & final): Due Oct 16 & Dec 15.** You will maintain a notebook for all activities done in class. A brief guide to the notebook is found on Sakai under "Resources". Examples of notebooks will be left in the lab for guidance.
4. **Final exam:** The exam will be online via Sakai. It will cover all the material from the semester and will be open-book. The exam will consist of multiple choice, matching, fill-in-the-blank, and short answer. Day and time will be announced as scheduled.

VII. Evaluation and Grading:

Reaction Paper	5%
Class Presentation	20%
Mid-term lab notebook	20%
Final lab notebook	20%
Final Exam	20%
<u>Class participation/preparedness</u>	<u>15%</u>
Total	100 points

VIII. Required Lab Supplies:

Students will need to buy the following items and bring them to **every** lab session:

1. Lab goggles (available from the campus book store)
2. Non-latex gloves (available from most drug stores)
3. 3-ring binder or notebook (to serve as your lab notebook)
4. Folder for all handouts
5. Pencil with eraser
6. Ruler (12inch)
7. Pen
8. Scissors
9. Loose lined paper (this will go into your lab notebook)
10. Graph paper
11. Unlined paper (like paper for your printer)
12. Packing tape and/or a small stapler (to secure work into your lab notebook)
13. Permanent (like sharpie) marker

IX. Lab Safety:

Students must adhere to all lab safety guidelines. Lab goggles must be worn at all times. Students must attend lab in full-length pants/trousers and closed-toe shoes. Lab coats are not required but students should be aware that they will be working with powders, chemicals, and other substances that may stain or damage clothing. Students may wish to bring a smock or disposable apron as a precaution.

- X. Attendance:**
Please make every effort to be present for class on time. If you do not attend class you will miss information that is not always available in the text or elsewhere that you will be responsible for on assessments; you will miss information as to schedule changes that may arise.
- XI. Late Assignments:**
Unless you have a legitimate excuse, absence, or emergency, you may not make-up any missed work and will thus receive a 0 for that assignment. Late assignments will not be graded and the student will receive a 0 for the assignment turned in late.
- XII. Academic Policies:**
Each student in this course is expected to abide by the University Code of Academic Integrity (<https://fas.camden.rutgers.edu/faculty/faculty-resources/academic-integrity-policy/>). Any work submitted by a student in this course for academic credit will be the student's own work. All writing assignment should be an original work by a student. Students are highly recommended to educate themselves on the subject; <http://library.camden.rutgers.edu/EducationalModule/Plagiarism/whatisplagiarism.html>
Forensic science is a profession that is internally maintained by ethics and personal integrity.
- XIII. Classroom Courtesy:**
Please do not catch up on sleep, search your wireless internet connection, text message your friends, listen to your iPod, read the newspaper or other unrelated materials, during class. Please turn cell phones off during class.
- XIV. Students with Disabilities:**
Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>