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FRSC 307-102: Crime Scene Investigation and Lab (Revised for Remote Learning)

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THE DEPARTMENT OF CHEMISTRY AND ENVIRONMENTAL SCIENCE

FRSC 307: Crime Scene Investigation & Lab M 6:00-8:50pm (TIER 209) R 5:45-7:40pm (TIER 114) Spring 2020 Course Syllabus

NJIT Academic Integrity Code: All Students should be aware that the Department of Chemistry & Environmental Science (CES) takes the University Code on Academic Integrity at NJIT very seriously and enforces it strictly. This means that there must not be any forms of plagiarism, i.e., copying of homework, class projects, or lab assignments, or any form of cheating in quizzes and exams. Under the University Code on Academic Integrity, students are obligated to report any such activities to the Instructor.

COURSE INFORMATION

Course Description: This course gives an overview of the cardinal principles and techniques of crime scene investigation, with an emphasis on a rigorous scientific approach. Students will be introduced to: crime scene documentation, sketches, and photography; specialized techniques for the recognition and enhancement of physical evidence; preparation and maintenance of case folders for records including notes, sketches, photographs, and contacts/communications; communication of results and preparation of formal reports; and ethics and bias in crime scene investigation. The primary aim of the course is to introduce students to scientific philosophy, integrity, CSI procedures, and the role of the crime scene investigator.

Number of Credits: 4

Prerequisites: FRSC 201

Course-Section and Instructor

Course-Section	Instructor
FRSC 307-102	Dr. Kevin Parmelee
M 6:00-8:50pm (TIER 209)	Office: Tiernan 323B
R 5:45-7:40pm (TIER 114)	Office Hours: By appointment
	email: parmskev@gmail.com

Required Textbook:

Title	Techniques of Crime Scene Investigation, 8 th ed.	
Author	Barry Fisher & David Fisher	
Edition	8	
Publisher	CRC	
ISBN #	978-1439810057	

and additional readings as assigned.

University-wide Withdrawal Date: The last day to withdraw with a **W** is Monday, April 6, 2020. It will be strictly enforced.

Learning Outcomes: Upon completion of this course, students will:

- Apply crime scene procedures and techniques to reveal physical evidence.
- Use the appropriate techniques to document the crime scene (notes, sketches, 3D scans, photography and video).
- Recognize, enhance, document, collect, handle, and package physical evidence using field-specific techniques.
- Maintain chain of custody.
- Identify and describe common field tests for the presumptive identification and enhancement of different types of physical evidence.
- Reconstruct a crime scene, including basic bloodstain pattern analysis and shooting scene trajectory analysis.
- Organize management of a crime scene, including allocation of personnel, resources, and time.
- Code of ethics for CSI's.
- Articulate the necessity of ethics in forensics and CSI and the potential ethical problems.
- Evaluate the physical evidence for a criminal investigation in terms of its significance.
- Identify applications of scientific investigative methods when examining crime scenes and physical evidence.
- Describe how science is used in the criminal justice system.
- Be able to testify in a clear and unbiased manner as to your findings at a crime scene under both direct and cross examination

POLICIES

All CES students must familiarize themselves with, and adhere to, all official university-wide student policies. CES takes these policies very seriously and enforces them strictly.

Grading Policy: The final grade in this course will be determined as follows:

Lab safety and cleanliness	10%
Class Participation	10%
Lab exercises	30%
Midterm Exam	20%
Final Exam	30%
Extra Credit will be given for attending NJIAI, NEAFS, or EAS	5% per conference
Extra Credit for attending Friday Forensic Seminar Series talks	1% per seminar

Your final letter grade in this course will be based on the following grading scale:

A	90-100	С	70-76
B+	87-89	D	60-69
В	80-86	F	<60
C+	77-79		

Attendance Policy: Attendance at classes will be recorded and is mandatory. Each class is a learning experience that cannot be replicated through simply "getting the notes." After two unexcused absences, each subsequent absence will result in your class participation score being lowered by one percentage point. You are expected to read the relevant chapter and/or reading assignment prior to the lecture. Students who participate in lecture will receive points towards their class participation grade.

Exams: There will be one midterm exam held in class during the semester and one comprehensive final exam. The following exam periods are tentative and therefore possibly subject to change:

Midterm Exam	March 12
Final Exam Period	May 8-14

The final exam will test your knowledge of all the course material taught in the entire course.

Makeup Exam Policy: There will normally be NO MAKE-UP QUIZZES OR EXAMS during the semester. In the event that a student has a legitimate reason for missing a quiz or exam, the student should contact the Dean of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also notify the CES Department Office/Instructor that the exam will be missed so that appropriate steps can be taken to make up the grade.

Research Paper Objectives

A template with formatting and font is provided on canvas for you to use. To successfully complete this paper, you will be expected to:

- 1. Analyze relevant criminal cases or current event involving Forensic Science.
- 2. Develop a topic for the paper.
- 3. Create an appropriate design.
- 4. Provide credible academic and peer reviewed resources.
- 5. Present the final draft formatted according to specification.
- 6. Communicate effectively through scholarly writing.

(Alternative to Paper) Research Project, Case Study, Objectives

To successfully complete this project, you will be expected to:

- 1. Analyze relevant criminal cases that involve the use of Forensic Science.
- 2. Develop a research project topic from one of the cases.
- 3. Create an appropriate research design.
- 4. Provide credible academic and peer reviewed resources
- 5. Identify and show how the application of forensic science impacted the criminal case.

- 6. Present the case study using various audio and or visual materials. (ex. WebEx, Quicktime, etc)
- 7. Communicate effectively the case study to the class through written (Power Point), technological (Canvas, WebEx), and/or verbal discussion (Audio, either recorded or live is required when presenting this assignment).

To achieve a successful project experience and outcome, you are expected to meet the following requirements.

Synthesize the content you have learned throughout this course into a research paper or project, which includes the following components:

- Class content, laboratory experiences and assignments
- A final draft of the project.

In addition to completing the components outlined above, use the following guidelines when creating your research plan:

- Written or verbal communication: Communication is free of errors that detract from the overall message.
- **APA formatting:** Resources and citations are formatted according to APA Style and Formatting (sixth edition).
- Font and font size: Arial, 12 point.

Cellular Phones: All cellular phones and other electronic devices must be switched off during all class times. Such devices must be turned in during exams.

ADDITIONAL RESOURCES

Accommodation of Disabilities: Office of Accessibility Resources and Services (formerly known as Disability Support Services) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you are in need of accommodations due to a disability please contact Chantonette Lyles, Associate Director at the Office of Accessibility Resources and Services at 973-596-5417 or via email at lyles@njit.edu. The office is located in Fenster Hall Room 260. A Letter of Accommodation Eligibility from the Office of Accessibility Resources Services office authorizing your accommodations will be required.

For further information regarding self-identification, the submission of medical documentation and additional support services provided please visit the Accessibility Resources and Services (OARS) website at:

• http://www5.njit.edu/studentsuccess/disability-support-services/

Important Dates:

Date	Day	Event
Jan 21	Tu	First Day of Classes
Jan 31	F	Last Day to Add/Drop Classes
March 15-22	Su-Su	Spring Break
April 6	М	Last Day to Withdraw
April 10	F	Good Friday-No Classes
May 5	Tu	Friday Classes meet
May 5	Tu	Last Day of Classes
May 6-7	Wed-Th	Reading Day
May 8-14	F-Th	Final Exam Period

Course Outline

Week	Date	Topic	Assignment
1	Jan 23	Intro to CSI; Quality Assurance / ISO 17020; Lab check in	Sign lab safety contract; buy PPE; Ch 1-3
2	Jan 27	First Officer at the Scene; The CSI; Specialized Personnel	Read Ch 4 & 5
	Jan 30	Processing the Crime Scene	
3	Feb 3	Crime Scene Sketch; Note taking; Forensic Photography	Lab 1; Read Ch 6
	Feb 6	Establishing Identity	
4	Feb 10	Developing Latent Fingerprints	Lab 2; Read Ch 7
	Feb 13	Trace Evidence	
5	Feb 17	AAFS Annual Scientific Meeting - PRESIDENTS DAY	
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	Feb 20	AAFS Annual Scientific Meeting	
6	Feb 24	Trace evidence lab	Lab 3; Read Ch 8
	Feb 27	Blood, Forensic Biology, and DNA	
7	March 2	ACSR Conference Reno , NV	
	March 5	ACSR Conference Reno , NV	
8	March 9	Blood Spatter Lab Part I	Lab 4
	March 12	Midterm	
9	March 16	SPRING BREAK	
	March 19	SPRING BREAK	
10	March 23	Blood Spatter Lab Part II (Research Report Topics)	Lab 5; Read Ch 9
	March 26	Impression Evidence (WEBEX-Discussion thread on Canvas)	
11	March 30	Footwear and Tire Impression Lab	Lab 6; Read Ch 10
	April 2	Firearms Examination (WEBEX-Discussion thread on Canvas)	
12	April 6	Bullet Trajectory Lab	Lab 7; Read Ch 15
	April 9	Motor Vehicle Examination (WEBEX-Discussion thread on Canvas)	
13	April 13	Vehicle Exam Lab (Meet in parking garage on Summit St.)	Lab 8; Read Ch 14
	April 16	Burglary Investigation (WEBEX-Discussion thread on Canvas)	
14	April 20	Burglary Investigation Lab (Case Study-lab)	Lab 9; Read Ch 16
	April 23	Visit to Bergen County Sheriff Crime Scene Unit	
15	April 27	Homicide Investigation (Case Study-lab)	
	April 30	Testifying on the stand; Ethics; and Professional Practice (WEBEX-Discussion thread on Canvas)	
13	May 4	Last day of class; Review for Final (Research Report Due)	
	May 7	Reading Day	Study for Final
14	May 11	Final Exam (Open Book-on Canvas)	

Updated by Kevin Parmelee - Jan 23, 2020 Department of Chemistry & Environmental Sciences Course Syllabus, Spring 2020