

THE DEPARTMENT OF CHEMISTRY AND ENVIRONMENTAL SCIENCE

**FRSC 201: Intro to Forensic Science**  
**Spring 2023**  
**T/R: 10:00-11:20 AM Tier**  
**Lect 1**  
***Course Syllabus***

**COURSE INFORMATION**

**Course Description:** This course introduces the principles and techniques of forensic science, including crime scene investigation and laboratory analysis. It is designed to be accessible to those without a science background, but at the same time will provide a well-rounded introduction to Forensic Science for those considering further studies in the field. **Number of Credits:** 3

**Prerequisites:** None

| Course-Section              | Instructor  |
|-----------------------------|---|
| FRSC 201                    | Sara C. Zapico  |
| Lecture T/R: 10:00-11:20 AM | Office: Tiernan Hall 365  |
| Tier Lect 1                 | Office Hours: By appointment through e-mail                                 |
|                             | Ph: 973-642-4070; email: <a href="mailto:sc338@njit.edu">sc338@njit.edu</a> |

**Required Textbook:**

|                  |  |
|------------------|--|
| <b>Title</b>     | <i>Criminalistics: An Introduction to Forensic Science</i> |
| <b>Author</b>    | Richard Saferstein, Tiffany Roy                            |
| <b>Edition</b>   | 13 <sup>th</sup>   |
| <b>Publisher</b> | Pearson Education  |
| <b>ISBN #</b>    | 9780135218310  |

and additional readings as assigned.

**University-wide Withdrawal Date:** The last day to withdraw with a W is Monday, April 3, 2023. It will be strictly enforced.

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

- Understand the definition and principles of Forensic Science.
- Acquire knowledge of the mission and tasks of different forensic disciplines.
- Discover the procedures involved in crime scene investigation.
- Recognize different types of evidence samples encountered at crime scenes.
- Learn and understand the techniques used to analyze the different types of samples.
- Develop and interpret a forensic report.
- Understand the interactions between Forensic Science and Law.

## **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.**

**NJIT Academic Integrity Code:** Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: <http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at [dos@njit.edu](mailto:dos@njit.edu).

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

|                               |     |
|-------------------------------|-----|
| <b>Class Participation</b>    | 10% |
| <b>Post-Lecture Questions</b> | 10% |
| <b>Quizzes</b>                | 30% |
| <b>Exams</b>                  | 50% |

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

|           |        |          |       |
|-----------|--------|----------|-------|
| <b>A</b>  | 90-100 | <b>C</b> | 70-76 |
| <b>B+</b> | 87-89  | <b>D</b> | 60-69 |
| <b>B</b>  | 80-86  | <b>F</b> | <60   |
| <b>C+</b> | 77-79  |          |       |

**Attendance Policy:** This is a face-to-face class. Class attendance is **mandatory**. Each class is a learning experience that cannot be replicated through simply “getting the notes.” After one unexcused absence, each subsequent absence will result in your class participation score being lowered by one percentage point. (All excused absences need to go through the Dean of Students). You are expected to read the relevant chapters and/or reading assignments prior to the lecture. Students who participate in class will receive points towards their class participation grade.

**Post-Lecture Questions (10%).** After the Lecture, answer one/two questions covered during the lesson.

**Quizzes (30%),** after covering each topic, you will complete a quiz with problem questions related to the topic. All quizzes consist of 10 questions selecting the best answer. The quizzes were designed to be completed in one sitting. Quizzes will be available in Canvas (online.fiu.edu). The quiz grades will be automatically posted in your “My Grades” in Canvas.

Exams 1, 2, 3 and 4 (50%). The non-cumulative Exams will evaluate your progress in the semester. You must take the four exams to get your final grade. All exams will be multiple-choice questions selecting the best answer and will be worth 50 points each. The expected date for each exam is given on the course schedule section, but these dates may vary. The date will be confirmed at least one week prior to the day of the exam.

*\*Note for Exams: Exams will be taken in class but online with Lockdown Browse. In order to make sure that Lockdown Browser works on your computer, a non-graded quiz must be taken at the beginning of the semester with Lockdown Browser and before getting access to the materials. Any students caught cheating based on Lockdown Browse results will have their exam's grade removed and disciplinary action is taken ranging from a failing grade being issued for that exam to formal misconduct charge being filed with the Provost's office, most likely both.* Exam scores will be posted on Canvas (online.fiu.edu).

**Makeup Exam Policy:** There will normally be **NO MAKE-UP EXAMS** during the semester. In the event that a student has a legitimate reason for missing an 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. A written assignment will be given in place of any missed exam.

## 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](mailto: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:

- <https://www.njit.edu/studentsuccess/accessibility>

**Important Dates** (See: [Spring 2023 Academic Calendar](#) | [Office of The Registrar \(njit.edu\)](#))

| Date     | Event  |
|----------|--|
| Jan 17   | First Day of Classes                               |
| Jan 23   | Last day to add or drop                            |
| March 13 | Spring Recess Begins                               |
| March 18 | Spring Recess Ends                                 |
| April 7  | Good Friday-No Classes Scheduled-University Closed |
| May 2    | Last Day of Classes                                |
| May 3-4  | Reading Days                                       |
| May 5-11 | Final Exams  |

| Lecture | Date        | Topic  | Assignment                            |
|---------|-------------|--|---------------------------------------|
| Week 1  | T, Jan 17   | Introduction   | 1                                     |
|         | R, Jan 19   | Introduction   |                                       |
| Week 2  | T, Jan 24   | Crime Scene  | 2                                     |
|         | R, Jan 26   | Crime Scene  |                                       |
| Week 3  | T, Jan 31   | Physical Evidence                                    | 3                                     |
|         | R, Feb 2    | Fingerprints   | 6                                     |
| Week 4  | T, Feb 7    | Review Exam 1-Microscopy                             | 8                                     |
|         | R, Feb 9    | <b>Exam 1</b>  | <b>1, 2, 3, 6</b>                     |
| Week 5  | T, Feb 14   | <b>AAFS meeting</b>                                  | <b>No class</b>                       |
|         | R, Feb 16   | <b>AAFS meeting</b>                                  | <b>No class</b>                       |
| Week 6  | T, Feb 21   | Bloodstain Pattern Analysis                          | 4                                     |
|         | R, Feb 23   | <b>No class</b>                                      | <b>No class</b>                       |
| Week 7  | T, Feb 28   | Forensic Serology                                    | 15                                    |
|         | R, March 2  | DNA  | 16                                    |
| Week 8  | T, March 7  | Review Exam 2  |                                       |
|         | R, March 9  | <b>Exam 2</b>  | <b>8, 4, 15, 16</b>                   |
| Week 9  | T, March 14 | <b>Spring Break</b>                                  | <b>No class</b>                       |
|         | R, March 16 | <b>Spring Break</b>                                  | <b>No class</b>                       |
| Week 10 | T, March 21 | Organic and Inorganic Analysis                       | 10, 12, 14                            |
|         | R, March 23 | Glass, Metals, Paint, and Soil                       | 10, 14                                |
| Week 11 | T, March 28 | Hairs and Fibers                                     | 11                                    |
|         | R, March 30 | Firearms, Tool Marks and Other Impressions           | 9                                     |
| Week 12 | T, April 4  | Review Exam 3  |                                       |
|         | R, April 6  | <b>Exam 3</b>  | <b>10, 11, 12, 14, 9</b>              |
| Week 13 | T, April 11 | Forensic Anthropology and Odontology                 | In class materials                    |
|         | R, April 13 | Forensic Aspects of Fire and Explosion Investigation | <b>17</b>                             |
| Week 14 | T, April 18 | Drugs  | 12                                    |
|         | R, April 20 | Forensic Toxicology                                  | <b>13</b>                             |
| Week 15 | T, April 25 | Cyber Forensics                                      |                                       |
|         | R, April 27 | Forensic Science and Law-Review Exam 4               | In class materials                    |
| Week 16 | T, May 2    | <b>Exam 4</b>  | <b>17, 12, 13, In class materials</b> |
|         |             |  |                                       |