

GEOL 3370 — Forensic Science

Spring 2022

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Office Hours: M-F daylight hours (via email) before/after class

COURSE DESCRIPTION

This is an introductory course in forensic science covering the scientific techniques used in identifying the criminal. In this course we will apply scientific techniques to the analysis of physical evidence and to the accumulation and presentation of evidence.

3 credit hours

COURSE OBJECTIVES

- **Recall, describe** and **explain** forensic science language, principles and methods.
- **Recall, describe** and **compare** physical evidence and how it can be used in criminal investigations.
- **Recall** and **explain** how a forensic scientist uses evidence and principles to support a conclusion. This includes the evidence used that lead up to past and current theories.
- **Perform** tests and collect data to **analyze** and **classify** forensic materials, features, and processes both qualitatively and quantitatively.
- **Acquire** and **communicate** scientific data, ideas, and interpretations through written, oral, and visual means.
- **Apply** critical thinking skills such as inductive, deductive, and mathematical reasoning to solve forensic problems using the scientific method.
- **Acquire** and **communicate** scientific data, ideas, and interpretations through written, oral, or visual means. Examples may include creating and describing graphs, maps, and photos.
- **Apply** critical thinking skills such as inductive, deductive, and mathematical reasoning to solve forensic science problems.

REQUIRED TEXT

Criminalistics, Richard Saferstein, 12th edition, ISBN: 978-0-134-47759-6 (paperback), or e-edition

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OTHER REQUIRED MATERIALS

- Reliable Internet access
- You will need to be able to read PDF files and to watch videos. Typically your computer will have software already installed to handle these tasks, but if not, here are the links to the free downloads: [Adobe reader](#), [Windows Media player](#)
- Microsoft Word software

THE COURSE DESIGN AND ASSIGNMENTS

Each module you will have a variety of activities. Check the schedule for the due dates and times.

ASSIGNMENTS 30%

These are the introduction to the materials, focusing on the readings in the text.

CLASS PARTICIPATION & DISCUSSION 30%

Discussions will provide you with an opportunity to:

- (a) discuss topics and issues with classmates,
- (b) ask questions of the Instructor or fellow classmates, and
- (c) will be used by the instructor to assess your attendance and participation.

MODULE EXAMS 30%

Two exams will be given (50) questions based off readings in the book (knowledge and comprehension: explain, identify, observe, summarize). These will be online. You will have two attempts, highest grade will count.

FINAL EXAM 10%

A comprehensive final exam will be presented. The material will come from the chapter reading quizzes. You will have two hours and two attempts. The exam will be taken online.

LATE WORK POLICY

Late work will be accepted up until midnight the night before the next activity is due. Module exams must be completed by the due date and may not be made up. Check the schedule for the dates.

Note: Computer problems are NOT an excuse for late work. It is good practice to complete work at least 24 hours in advance in case of emergencies. Also, plan to have a back-up computer or Internet access location (library, computer lab, etc.) in case something happens at your primary location.

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INCOMPLETES

The grade of I is given for passable work that could not be completed due to circumstances beyond the student's control that occurs after the last day to withdraw from the course.

CLASS CONDUCT

Professionalism in class will be always expected. Disrespectful or rude comments will not be tolerated and could lead to removal from access to class.

WITHDRAWAL

Students who do not complete the first week's assignments may be submitted to the VPAA and VPSS for withdrawal from the course. The last day for withdrawal from the class with a W can be found in the Academic Calendar. All students enrolled at the end of the course will receive a grade based on work completed.

ATTENDANCE

Your attendance is based on your participation in class and submitting work on time. Please review the late policy carefully. There are no exceptions.

ACADEMIC HONESTY

Academic honesty is required. YOUR WORK MUST BE YOUR OWN! You may work together, but you must produce your own assignments. You are expected to understand plagiarism and copyright laws and to follow them. Plagiarized work will result in a zero on the assignment and possible failure of the course on the first incident and failure of the course on a second incident. I will follow the Academic Conduct policies per the link below.

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COURSE SCHEDULE

Please mark your calendar with the following due dates. Details about these assignments can be found in Blackboard in the Learning Modules.

Learning Module	Topics	Chapter Readings
1	The Syllabus, The Process of Science	Chapter 1
2	The Crime Scene	Chapter 2
3	Physical Evidence	Chapters 3, 8, 9
4	Fingerprints	Chapter 6
	Exam 1	
5	Matter, Light, and Glass Examination	Chapter 10
6	Hairs & Fibers	Chapter 11
7	Metal, Paint & Soil	Chapter 14
8	Fire Investigation	Chapter 12
	Exam 2	
9	Document Examination	Chapter 18
10	Computer Forensics	Chapter 19
11	Mobile Device Forensics	Chapter 20

NOTE: This schedule is subject to change based on the needs of the class. You will be notified of all changes through email in Blackboard and in class.
