

## Forensics

### Course Description

This is a one-year lab-intensive course that allows students to pursue an in-depth study of forensic science as a tool for collecting evidence and crime scene analysis. Areas of study include physical evidence, properties of matter and the analysis of glass, drugs, forensic toxicology, the microscope, forensic serology, DNA, trace evidence, fire investigation, investigation of explosives, fingerprints, ballistics, forensic anthropology, casts and impressions, document examination and computer forensics.

### Course Objectives

- Demonstrate an understanding of academic honesty and ethics.
- Demonstrate effective communication skills, through team working, oral presentations, and good written communication.
- Develop and refine skills related to academic research and the effective communication of complex ideas.
- Be able to apply different techniques and processes within science in service to the law.

### Assessing Performance

Students are assessed by obtaining weekly grades from the following: Tests, Lab Reports, Communicative Projects, Group Reports, Crime Scene Analyses, Mock Trials

### Concepts Covered

<b>History</b>	<b>Tools</b>	<b>Biological Evidence</b>	<b>Ballistics</b>
<b>Fibers</b>	<b>Toxicology</b>	<b>Chemical Evidence</b>	<b>Crime Scene Analysis</b>
<b>Psychology</b>	<b>Evidence Handling</b>	<b>Physical Evidence</b>	

### Materials

Most modules use typical lab equipment found in science classrooms (beakers, flasks, pipettes, scales, plastic well plates, graduated cylinders, goggles), but some require specialized equipment. The items below are reusable one-time purchases. Consult with the trained teachers to better determine what materials are necessary for their chosen modules.

<b>Hardware/Reusable Material</b>	<b>Recommended Unit</b>	<b>Cost/Unit</b>
Microscope (with 100X objective) with 100 glass slides/cover-slips	1 per 4-5 students	\$210
Bullet comparison set	1 per 4-5 students	\$25
Fingerprint kit	1 per 4-5 students	\$75
Mortar and Pestle	1 per 4-5 students	\$5
Meter Stick	1 per 2 students	\$5
<b>Consumables</b>		

## Forensics

Various consumables for experiments	1 per student	\$20*
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\*Complete supply list with purchase links: [Forensic Science Supply List](#)

## FORENSIC SCIENCE

1. Materials

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2. Required teacher collaborations:

Teachers will communicate with LSU Biomedical pathway instructors via a Google group set up for this purpose.

3. Required administration of course content, pre/post test, and research instruments

All required materials and instruments will be either posted in a Google drive or their location announced via the Google group for this course. Teachers will need to share sample student work with their designated LSU Pathway Point-of-Contact.

4. Course Work

Teachers must present the course material in sequence or as approved by collaboration with the LSU Pathway Point-of-Contact. Teachers are expected to deliver a minimum of 80% of the course material.

5. Other

As this is a project-based learning class, we strongly suggest that each section of the course should be limited to a *maximum* of 30 students. If the course is overloaded with students, they will not receive adequate support.