

Department: Science

Course Name: Forensic Science

Course Description:

Forensic science is an interdisciplinary, full-year elective course that offers students the opportunity to apply science when investigating a crime scene and analyzing evidence. The course combines biology, biotechnology, chemistry, and physics. Students will develop and hone their observational skills, as well as learn laboratory skills such as: microscopy, chromatography, serology, DNA fingerprinting, fingerprinting, ballistics and firearm identification, blood spatter analysis, document analysis, as well as other skills commonly used during a forensic investigation. Forensic science requires lab work and written reports. Pre-requisites include Biology and Chemistry.

Content:

Deductive Reasoning
Lab Safety
Eyewitness Testimony and The Innocence Project
History of Forensics
Investigative Processes
Types of Evidence
Searching and Photographing the Scene
Evidence Collection
From Crime Scene to Courtroom
Hair Analysis
Fingerprints
Blood Analysis
Fibers
DNA Profiling
Ballistics
Arson (if time allows)
Forensic Entomology
Forensic Toxicology
Forensic Anthropology (if time allows)

Skills:

Make observations
Gather and analyze evidence
Apply concepts learned in other science classes
Develop computer skills
Apply math concepts learned in other classes
Utilize a learning management system for accessing content, assignments, and assignment submissions

Text and Materials:

Bertino & Bertino, Forensic Science, Fundamentals & Investigations, (National Geographic Learning, South-Western Cengage Learning, 2nd Edition, 2012)

Methods of Instruction:

Lectures
Interactive Presentations

Experiments
Directed Activities
Demonstration
Videos
Student Projects
Class Discussions
Case Studies

Methods of Evaluation:

Quizzes (including online assessment)
Tests
Homework
Class Projects
Lab Reports

