

**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, 2<sup>nd</sup> 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

