



## **Forensic Science**

Wednesdays, September 14-December 14 (No class Oct 12 or Nov 23; 12 weeks)

1:00pm-2:30pm

Ages 11+

**In this course, students will learn how to apply various fields of science to a law enforcement context. Students will learn how to properly handle, collect, and transfer evidence as well as documenting their observations. All lab costs are included in registration fee.**

Location: Discover Science Center – Peachtree City

Course fee: - \$275 OR \$25/lab

10% off sibling discount

Register for full semester or individual labs.

### **LAB SCHEDULE:**

**FORENSIC SCIENCE AND EVIDENCE GATHERING** - Wednesday, September 14

Students are introduced to the science of forensics, learn about proper data gathering, evidence collection, and chain of custody in crime scene investigations.

**CRIME SCENE PHOTOGRAPHY** - Wednesday, September 21

Students learn the importance of standardized staging in crime scene photography as well as how to photograph their own evidence.

**DNA** - Wednesday, September 28

Students review the structure and function of DNA, learn how scientists collect and extract DNA, and investigate different DNA technologies used for analysis.

**FINGERPRINTING** - Wednesday, October 5

This week we learn the identifying characteristics of fingerprints, the history of fingerprint analysis, how to use fingerprint data, and how to recover fingerprints from a crime scene.

**BLOOD SPATTER** - Wednesday, October 19

We focus on the biology, chemistry, and physics of blood this week. Students will learn the components of blood, the chemistry of detecting blood at a crime scene, and the physics of spatter.

**FORENSIC ANTHROPOLOGY** - Wednesday, October 26

This week, we learn about the science of bones, including how they are formed and grow, what they can tell us about an individual, and how they can reveal information from a crime scene.

### **FORENSIC ENTOMOLOGY - Wednesday, November 2**

In this lab, we study insect life cycles and how they can assist in determining the location and chronology of a crime, as well as the stages of decomposition and how they are influenced by environment.

### **TRACE EVIDENCE AND FIBER ANALYSIS - Wednesday, November 9**

Students learn the proper microscopic techniques required to differentiate different types of hair and other trace evidence materials that can be left behind at a crime scene.

### **OUTDATED SCIENCE - Wednesday, November 16**

This week, we focus on types of science that have historically been used in law enforcement, but which are being brought into question by the scientific community for their validity, such as forensic odontology, hair analysis, and lie detectors.

### **WEAPON ANALYSIS - Wednesday, November 30**

Students study ballistic and kerf markings to differentiate weapons used in a crime, as well as learning why those markings are left behind.

### **POWDER ANALYSIS - Wednesday, December 7**

Using chemical analysis and observation, we identify unknown powders to model the analysis of poisons or drugs that may be found at a crime scene.

### **CRIME SCENE INVESTIGATION - Wednesday, December 14**

In a culmination of the skills and techniques learned over the course of this semester, students work together to solve a crime and present their evidence. Once the case is solved, students work together to create their own crime scene scenario.