

Online Courses for High School Students 1-888-972-6237

Forensic Science II: More Secrets of the Dead

Every time a crime is committed, a virtual trail of incriminating evidence is left behind just waiting to be found and analyzed. In Forensic Science II: More Secrets of the Dead, you'll learn even more about the powerful science of forensics and how it has changed the face of crime and justice in our world. You will learn some basic scientific principles used in the lab, such as toxicology, material analysis, microscopy, and forensic anthropology and find out how scientists use everything from insects to bones to help them solve crimes. Discover how advanced techniques and methodical processes can lead to catching even the craftiest criminal. The best way to battle crime these days is not with a weapon, but with science.

Course Highlights

- Explore how bones and bugs help solve crimes.
- Examine some of the forensic science laboratory techniques for identifying and testing drug evidence and toxin.
- Investigate how paint, soil, and trace evidence is found and analyzed.
- Analyze newer trends in forensic science, including the investigation of digital crime.

Prerequisite: Forensic Science I
Course Length: One Semester
Required Text: There are no required textbook for this course.
Materials List: There are no required materials for this course.

Course Outline:

Unit 1: Drug Evidence

The illegal drug trade has been a major concern within North America for law enforcement and the criminal justice system. It is not surprising, then, that this area also presents a major area for forensic science. Forensic scientists play an important role in investigating and solving drug cases. Not only do they help to identify whether illegal drugs are present at a crime scene, but they also help identify the particular drugs and how they may have been involved in different crimes.

Unit 2: Forgeries and Document Examination

During crime investigations, forensic scientists may be called upon to determine whether a paper, signature, or other created document is authentic or whether it is fake. In this unit, we will examine the area of document examination. Document examination may include comparing the handwriting of several samples, linking documents to the particular machines that created them, and identifying counterfeit papers and money. We will discuss some of the aspects that document examiners look for in comparing documents and some of the techniques they use to find alterations in documents.

Unit 3: Forensic Toxicology

Arsenic, cyanide, and strychnine have all been used to try to harm other individuals throughout the course of history. Although poisoning may not be the most common way of trying to kill someone, it does happen, and forensic scientists play an important role in determining what has occurred. In this unit, we will explore some of the poisonous substances that exist and how forensic scientists test for and identify poisons.

Unit 4: Paint, Soil, & Trace Evidence

Trace evidence left at a crime scene can yield important clues about the victim, perpetrator, and the crime scene. In this unit, we will examine some of the trace forms of evidence that forensic scientists may use to help them solve crimes. These may include paint chips, pieces of metal, soil, and so on. In doing so, we will examine some of the techniques that forensic scientists use to identify and compare these pieces of evidence.

Unit 5: Forensic Entomology

In some criminal investigations, forensic scientists examine insects and other arthropods. In this unit, we will explore the area of forensic entomology and its use in criminal investigations. We will learn about the history of forensic entomology and the types of insects commonly encountered in crime investigations. We will also examine some of the tests and techniques used to study the insects.

Unit 6: Forensic Anthropology

Bodies, bones, and teeth can provide investigators with important information about how someone died. In this unit, we will explore the areas of forensic anthropology and facial reconstruction. We will consider some of the aspects that forensic scientists look for when examining bodies and skeletons.

Unit 7: Digital Evidence

Computers are increasingly playing an important role not only in our daily lives, but also in the area of criminal investigation. In this unit, we will learn about the evidence that can be gained from computers and other electronic devices. We will consider how information can be retrieved from computers and how computer evidence should be preserved.

Unit 8: The Future of Forensic Science

As technology has changed and advanced so too has the area of forensic science. In this unit, we will consider how computers are being used in forensic investigations. We will look at how forensic scientists retrieve web-based information as evidence and investigate the problem of hacking. We will learn more about some of the databases that forensic scientists use in their work. We will also examine what the future of forensic science may hold and how crime investigation is likely to change.