



Forensic Science I: Secrets of the Dead

Course Outline

Course Overview

Fingerprints. Blood spatter. DNA analysis. The world of law enforcement is increasingly making use of the techniques and knowledge from the sciences to better understand the crimes that are committed and to catch those individuals responsible for the crimes. Forensic science applies scientific knowledge to the criminal justice system. This course focuses on some of the techniques and practices used by forensic scientists during a crime scene investigation (CSI). Starting with how clues and data are recorded and preserved, the student will follow evidence trails until the CSI goes to trial, examining how various elements of the crime scene are analyzed and processed.

Course Content and Suggested Timelines

The suggested timeline is for students aiming to complete the course in one semester (5 months). Double the timeframes for two semesters (10 months).

Unit 1: Introduction to Forensic Science (Suggested time: 2 weeks)

In this unit, you will learn about forensic science as a field of study.

Unit 2: The Crime Scene (Suggested time: 2.5 weeks)

You will learn about the different ways in which a crime scene is recorded, and evidence is collected.

Unit 3: Physical Evidence (Suggested time: 2 weeks)

Different types of evidence is examined, and how chemical and physical properties can help forensic scientists compare samples.

Unit 4: Physical Evidence: Hair, Blood and Fingerprints (Suggested time: 2.5 weeks)

Hair, blood and fingerprint evidence is covered in this unit, along with how DNA can be collected.

Unit 5: Firearms and Tool Marks (Suggested time: 2 weeks)

You will learn about how firearm and bullet evidence is collected from a crime scene, along with what can be learned from tool marks.

Unit 6: Human Remains (Suggested time: 2.5 weeks)

You will investigate some of the ways that can help determine the time of death. You will also learn about forensic autopsy and about the information that can be gained from skeletal remains.

Unit 7: DNA Evidence (Suggested time: 2 weeks)

Properties of DNA and how it is tested is covered in this unit. You will also examine how it can be used in court trials.

Unit 8: Arson and Explosion Evidence (Suggested time: 2.5 weeks)

We will discuss what challenges arson and explosion crime scenes present in the collection, preservation, and analysis of evidence.

Course Materials

There is no textbook for this course as all resources are found directly in the course itself.

Assessment Information

Text Questions: 20%

Lab Assignments: 20%

Discussion Questions: 25%

Unit Quizzes: 15%

Exams: 20%

Review Questions and Laboratory Assignments

Successful students will demonstrate their learning by answering questions that are taken directly from the course materials. Additional research is not a bad idea if you want to add additional examples but when you do, please include sources and links to materials your teacher can view.

Learning demonstrated in the Critical Thinking questions should combine prior knowledge, new information and opinions. Students should define terms in their answers, recount case evidence thoroughly, demonstrate an understanding of the Forensic Science (including any history or anthropology) that is used to make determinations, and the way the science is applied to the problems/cases.

It will be difficult for you to do this with less than a paragraph.

Discussion Questions

Successful discussion answers will take the questions posed and use critical thinking to address the subject. Some research can help to answer the question, and examples are always a good idea. Understanding the unit materials and careful consideration of your own personal strengths as it relates to the career will also help.

Unit Quizzes

Students will complete a timed quiz at the end of each unit. A study focus on theories, ideas, people and the language used in Forensic Science will ensure success.

Midterm Exam and Final Exam

The midterm exam focuses on the learning outcomes of the first four units of the course. The final exam focuses on the learning outcomes of the last four units of the course.

When students are not meeting the learning outcomes/falling behind

When students fall behind the expected pace or plan, they will be contacted via email or phone and if there is no improvement or response, parents will also be contacted. If deemed necessary, contact with the student's home school may also occur to help determine a solution.

Students are expected to let the course teacher know when they are struggling with course content. In response, the course teacher will provide appropriate help or strategies to support learning. The course teacher will also provide feedback on course work to support learning and help students improve. Parents will be made aware if their child is actively working but struggling to meet the learning outcomes of the course.

Students falling behind in a manner where it does not appear that they will complete the course within a year will be sent reminder emails. Without a response or renewed efforts in the course, the student may be assigned an F or withdrawn. Should they begin actively working in the course, the student may be given an alternate completion date.

Expectations

- Adhere to the EBUS Academic Integrity Policy
- Contact your teacher when help is needed
- Review feedback from assignments and tests, where applicable
- Work to complete the course in a timely manner
- Communicate respectfully
- Review weekly progress reports

Reporting to Parents:

There are 4 term report cards that can be downloaded from the student dashboard. A notice will go out when these report cards are available.

Every week that EBUS is in Session the teacher will send out a progress report showing the student's progress.

Contacting Your Teacher:

Your teacher will be available Monday- Friday during regular school hours. If you are having trouble with any concepts, please contact your teacher right away!

Your teacher for this course is:

Lisa Zukewich

lzukewich@sd91.bc.ca