

SC5810/ Forensic Science 1 Syllabus

Course Title-----	Forensic Science 1
Course Number-----	SC5810
Grades:-----	11-12
High School Credit Value:-----	0.5
Prerequisites:-----	The prerequisite for Forensic Science is a high school biology or chemistry course.
Course Length:-----	Regular courses: 17 weeks CR: 9-17 weeks.
Course Time:-----	Regular courses: 17 week schedule: 75 - 90 minutes per school day (6-7.5 hours per week) Credit Retrieval: 75 - 90 minutes per school day (6-7.5 hours per week) until course completion.

{ Course Description }

There is a fine line between the imaginary world of CSI and the real world of a forensic scientist. The goal of this course is to give you a glimpse into the broad and fascinating field of forensic science. During your eight unit exploration, you will explore the foundations of forensics, how crime scenes are processed as well as the different types of physical, biological and trace evidence that is encountered and analyzed.

This course helps meet the state minimum requirements of 1.0 Occupational education (CTE - CIP:) credits, or a science requirement or it may be used towards the 5.5 minimum elective credits required. Please check with your district for more specific requirements.

Course Materials:

The only required materials for this course are a computer with internet access.

State Alignments

Washington State Standards guided the design of the course. Learning expectations are found within the course itself.

Jurisprudence & Evidence Collection: The student will be able to explain and apply the principles and practices in the processing of a crime scene to collect evidence within the context of legal & constitutional limitations during a forensic investigation.

Biological Evidence: The student will be able to collect, analyze and explain the importance of various types of

biological evidence within the context of forensic investigation. Such evidence includes hair, pollen, spore, insect and botanical (plant) evidence.

Serology & Spatter Analysis: The student will be able to explain and apply the principles of blood typing in order to match unknown blood with a known sample as well as analyze a blood spatter pattern to reconstruct the events that created that pattern.

Odontology: The student will be able to analyze and explain the importance of tooth and bite mark evidence in the context of a forensic investigation.

Anthropology: The student will be able to explain how characteristics within the human skeleton are used to create a biological profile and demonstrate the method in which the biological profile is created to identify unknown remains in a forensic investigation.

Trace Evidence: The student will be able to collect, analyze, identify and explain the importance of various types of trace evidence within the context of a forensic investigation. Common examples of trace evidence include fibers, glass, soil and paint evidence.

Fingerprinting: The student will be able to collect, analyze, identify and explain the importance of fingerprints and friction ridge landmarks within the context of a forensic investigation.

Drug Identification & Toxicology: The student will be able to analyze, interpret and explain the toxicological principles used in the study and identification of drugs, poisons and alcohol in a forensic investigation.

Questioned Documents & Handwriting Analysis: The student will demonstrate the principles used to analyze handwriting and identify questioned documents and forgeries used in a forensic investigation.

Ballistics & Tool Marks: The student will be able to analyze and explain the principles used in the analysis of ballistic evidence, tool marks and casts in a forensic investigation.

Pathology & Human Remains: The student will be able to explain the processes used to examine human remains to determine the cause of death, manner of death and time of death in a forensic investigation.

Course Outline

Unit	17 Week Learning Plan Contract	12 Week Learning Plan Contract
<u>Unit 1:</u> Introduction To Forensic Science & The History of Forensics	2 Weeks	2 Weeks
<u>Unit 2:</u> The Crime Scene- Exploring How Crime Scenes Are Processed	2 Weeks	1 Week
<u>Unit 3:</u> Physical Evidence	2 Weeks	2 Weeks
<u>Unit 4:</u> Biological Evidence- Hair, Blood and Fingerprints	2 Weeks	1 Week
Midterm Exam & Discussion	1 Week	1 Week
<u>Unit 5:</u> Firearms & Toolmarks	2 Weeks	1 Week

Unit 6: The Study of Human Remains	2 Weeks	1 Week
Unit 7: DNA	2 Weeks	1 Week
Unit 8: Arson & Explosives Evidence	2 Weeks	1 Week

Course Work

Types of Assignments and Submitting Student Work: For each unit there will be multiple lessons, typically 4 or 5. After you have finished the lessons, there are 3 pieces of written work that you will need to submit to me and finally a unit quiz. The first are text questions that reflect upon what you have read and need to come away with from the lessons.

Secondly there will be the questions associated with the lab activity, and finally, there will be discussion questions which you will need to respond to.

After you have completed those items, there will be review tips and a study game to prepare you for your unit quizzes. All course work is submitted through the eDynamics uploading page that is specific to each activity.

You will be expected to submit all chapter activities (labs and text questions), as well as the discussions for the midterm unit and final exam. In addition, you must complete all assessments. Any work that is not completed upon your request for a final grade will be scored as a "zero".

Grading

Revision Policy: The goal of this course is to demonstrate learning. Students have the opportunity to revise work until it meets standards. To do so, they should resubmit the work and make corrections in a different color. Students will be given two opportunities to revise work to raise scores. Remember, "A" grades are earned on assignments that go beyond expectations.

If a student wishes to re-assess, they will have one additional opportunity on the Unit Exams. The midterm and final exam can only be taken once.

Occupational Credit:

This course may qualify for *occupational credit. Please consult your school counselor for further clarification.

*Please note that FLA901 (Sign Language) does not qualify for occupational credit.