Union County Educational Services Commission
High School Course Syllabus

Title: Forensics

Timeline: Full Year; 5 Credits

Course Description:
How do you catch a criminal? That is the question that this guiding and scientifically rigorous class attempts to answer. Through new-age techniques and historical precedents, the topic of legality and CSI merge into this cause-and-effect course of intrigue and deceit. From fingerprinting to DNA analysis, students will get a front row seat into the inner workings of our criminal justice system. Moreover, they will learn how the guilty get convicted and the innocent get exonerated in the United States.

Scope and Sequence:
I. Investigation & Evidence Hair, Fiber, DNA, Fingerprints
II. Death Manner Mechanism Cause / Forensic Anthropology
III. Forensic Psychology

Refer to the attached curriculum map for a detailed outline of course objectives.

Curriculum Alignment:
New Jersey Student Learning Standards/Next Generation Science Standards - Life Science

Grading Procedures:

Do Now	10%
Participation	20%
Class Assignments	50%
Assessments	20%

Adoption Date:

Union County Educational Services Commission
Curriculum Mapping Format: Forensics

Unit	Unit 1	Unit 2	Unit 3
Length of Unit	13 Weeks	13 Weeks	13 Weeks
Topics	Investigation & Evidence	Death Manner Mechanism Cause/ and Forensic Anthropology	Forensic Psychology
Standards	**HS-LS-3-1 -** Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring. **HS-LS3-3 -** Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population. **HS-ETS1-2 -** Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.	**HS-ETS1-2 -** Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. **HS-PS2-1 -** Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration. **HS-LS3-2 -** Make and defend a claim based on evidence that inheritable genetic variations may result from (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.	**HS-ETS1-2 -** Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. **HS-PS2-1 -** Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.
Content/ Disciplinary Core Ideas	Observation Skills Crime Scene Eyewitness Accounts Locard's Principle Hair Fiber DNA Fingerprints	Four Manners of Death Stages of Decomposition Autopsy Report Insects and the Determined Time of Death Environmental Factors in Determination of Time of Death Using Bones and Bone Fragments	The Mind of Psychopath What Makes a Serial Killer Mass Murder vs. Serial Killing Gang Mentality and How it Relates to Psychology History of Profiling Modius Opernadi Signature of Serial Killers
Skills/ Science and Engineering Principles	Developing and Using Models Engaging in Argument from Evidence Constructing Explanations and	Constructing Explanations and Designing Solutions Obtaining, Evaluating, and Communicating Information	Analyzing and Interpreting Data Using Mathematics and Computational Thinking Constructing Explanations and

	Designing Solutions	Analyzing and Interpreting Data Asking Questions and Defining Problems Planning and Carrying Out Investigations Engaging in Argument from Evidence	Designing Solutions Engaging in Argument from Evidence Obtaining, Evaluating, and Communicating Information Constructing Explanations and Designing Solutions
Crosscutting Concepts	Cause and Effect Scale, Proportion, and Quantity	Cause and Effect Patterns Stability and Change	Cause and Effect Patterns Stability and Change