



Bow High School - Course Map

Course Title: Forensic Science
Department: Science

Unit Name: Safety
Topics: • Basic Science Classroom Safety • Safety specific to Forensic Science
School Competencies: •
Course Competencies: • Students will learn the specific safety policies and procedures for Forensic Science.
Formative Assessments: • Safety Map • Daily Check-in 3: Safety Guidelines
Summative Assessments: • Safety Summative



Bow High School - Course Map

Unit Name: Crime Scene Observation & Analysis
Topics: • Observation • Deductive Reasoning • Data recording • Crime Scene Sketch drawing
School Competencies: •
Course Competencies: • Students will be able to collect and analyze biometric data both individually and in a group. Data will include lifting fingerprints, comparing fingerprints, testing blood for Rh and blood type, and performing and analyzing gel electrophoresis for DNA. • Students will use biometric data to evaluate potential causal relationships. • Students will work with a group to collect all information from a crime scene. Labeled photographs, numbered data, complete sketches are a few of the items that will be collected and reported. • Students will demonstrate the ability to work collaboratively and individually to define problems, plan and conduct investigations, and analyze and interpret data while following safety precautions • Students will examine examples of literature and media within the detective and mystery genres to understand the significance and implications within history, society and the field of forensics. • Students will use analytical skills such as measurement and finding a transcending line to recreate and sketch a crime scene. • Students will effectively communicate the research process and conclusions. Writing conventions will be followed.
Formative Assessments: • Daily Check-in • Miniature Crime Scene Analysis • Lab: Footprints • Murder in the Rue Morgue • Lab: Deadly Picnic
Summative Assessments: • Crime Scene Summative 1



Bow High School - Course Map

Unit Name: Fingerprinting
Topics: • Ink Fingerprinting • Fingerprint Minutiae • Fingerprinting - Dusting Method • Fingerprinting - Superglue Fuming Method
School Competencies: •
Course Competencies: • Students will be able to collect and analyze biometric data both individually and in a group. Data will include lifting fingerprints, comparing fingerprints, testing blood for Rh and blood type, and performing and analyzing gel electrophoresis for DNA. • Students will use biometric data to evaluate potential causal relationships. • Students will work with a group to collect all information from a crime scene. Labeled photographs, numbered data, complete sketches are a few of the items that will be collected and reported. • Students will use analytical skills such as measurement and finding a transcending line to recreate and sketch a crime scene. • Students will demonstrate the ability to work collaboratively and individually to define problems, plan and conduct investigations, and analyze and interpret data while following safety precautions • Students will examine examples of literature and media within the detective and mystery genres to understand the significance and implications within history, society and the field of forensics. • Students will effectively communicate the research process and conclusions. Writing conventions will be followed.
Formative Assessments: • Ink Fingerprinting Mini-Lab • Balloon Fingerprints Mini-Lab • Daily Check -in 12, 13, 14, 15 • Fingerprints Lab - Dusting Method • Lifting Fingerprints - Superglue Fuming Method
Summative Assessments: • Crime Scene Summative 2 - Fingerprint Analysis



Bow High School - Course Map

Unit Name: Blood Evidence
Topics: • Testing for Rh and Blood Type • Blood Spatter Analysis
School Competencies: •
Course Competencies: • Students will be able to collect and analyze biometric data both individually and in a group. Data will include lifting fingerprints, comparing fingerprints, testing blood for Rh and blood type, and performing and analyzing gel electrophoresis for DNA. • Students will use biometric data to evaluate potential causal relationships. • Students will work with a group to collect all information from a crime scene. Labeled photographs, numbered data, complete sketches are a few of the items that will be collected and reported. • Students will demonstrate the ability to work collaboratively and individually to define problems, plan and conduct investigations, and analyze and interpret data while following safety precautions • Students will examine examples of literature and media within the detective and mystery genres to understand the significance and implications within history, society and the field of forensics. • Students will effectively communicate the research process and conclusions. Writing conventions will be followed.
Formative Assessments: • Blood Typing Lab • Daily Check-in 16 , 17, 18, 20, 21, 22 • Blood Spatter - Medium Velocity Lab • Height and Velocity of Blood Lab • Blood Back Spatter Lab
Summative Assessments: • Blood Evidence Quiz • Crime Scene Summative 3 - DNA, Blood Evidence and Fingerprinting



Bow High School - Course Map

Unit Name: DNA Evidence
Topics: • Basic structure and function of DNA • Polymerase Chain Reaction & Gel Electrophoresis • DNA Evidence Case Studies
School Competencies: •
Course Competencies: • Students will be able to collect and analyze biometric data both individually and in a group. Data will include lifting fingerprints, comparing fingerprints, testing blood for Rh and blood type, and performing and analyzing gel electrophoresis for DNA. • Students will use biometric data to evaluate potential causal relationships. • Students will work with a group to collect all information from a crime scene. Labeled photographs, numbered data, complete sketches are a few of the items that will be collected and reported. • Students will demonstrate the ability to work collaboratively and individually to define problems, plan and conduct investigations, and analyze and interpret data while following safety precautions • Students will examine examples of literature and media within the detective and mystery genres to understand the significance and implications within history, society and the field of forensics. • Students will effectively communicate the research process and conclusions. Writing conventions will be followed.
Formative Assessments: • Using Genetics to End Poaching of Elephants • Daily Check-in 24, 25 • DNA Fingerprinting Case Study
Summative Assessments: • Crime Scene Summative 3 - DNA, Blood, and Fingerprinting • Mini Crime Scene Project



Bow High School - Course Map

Unit Name: Skeletal Evidence
Topics: • Estimating height based on bone size
School Competencies: •
Course Competencies: • Students will be able to collect and analyze biometric data both individually and in a group. Data will include lifting fingerprints, comparing fingerprints, testing blood for Rh and blood type, and performing and analyzing gel electrophoresis for DNA. • Students will use biometric data to evaluate potential causal relationships. • Students will work with a group to collect all information from a crime scene. Labeled photographs, numbered data, complete sketches are a few of the items that will be collected and reported. • Students will demonstrate the ability to work collaboratively and individually to define problems, plan and conduct investigations, and analyze and interpret data while following safety precautions • Students will examine examples of literature and media within the detective and mystery genres to understand the significance and implications within history, society and the field of forensics. • Students will effectively communicate the research process and conclusions. Writing conventions will be followed.
Formative Assessments: • Daily check-in 28 • Lab: No Bones about it
Summative Assessments: •



Bow High School - Course Map

Unit Name: Final Project
Topics: Describe a type of Forensic that was not discussed in class and present it to the class as well as a case study in that area.
School Competencies:
Course Competencies: - Students will be able to collect and analyze biometric data both individually and in a group. Data will include lifting fingerprints, comparing fingerprints, testing blood for Rh and blood type, and performing and analyzing gel electrophoresis for DNA. - Students will use biometric data to evaluate potential causal relationships. - Students will work with a group to collect all information from a crime scene. Labeled photographs, numbered data, complete sketches are a few of the items that will be collected and reported. - Students will demonstrate the ability to work collaboratively and individually to define problems, plan and conduct investigations, and analyze and interpret data while following safety precautions - Students will examine examples of literature and media within the detective and mystery genres to understand the significance and implications within history, society and the field of forensics. - Students will effectively communicate the research process and conclusions. Writing conventions will be followed.
Formative Assessments:
Summative Assessments: - Video Presentation on the area of Forensics that was not discussed in class. - Presentation on a crime that was solved utilizing the method that was discussed