|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Time Frame | Topic/Unit | Skills/Concepts | Major Assessments | Core Standards | Resources |
| 2 weeks | Intro to Forensics | * Historic Development
* Crime Detection in Literature
* Locard’s Principal
* Frye vs Daubert
 |  |  | SUPA PowerPointsTextbook |
| 2 weeks | Crime Scene Investigation | * Crime Scene Evidence and Collection
* 4th Amendment
* Types of Scenes
 |  |  | SUPA PowerPointsTextbookLab – SafetyLab – Crime Scene Mock |
| 1 week | Pseudoscience | * Statistics and Probability
* Pseudoscience and Scientific Method
* Ethics
 |  |  | SUPA PowerPointsTextbook |
| 1 week | Microscopy | * Reliability of measurement
* Review parts of microscope
* Optical and Electron Microscopy
 |  |  | SUPA PowerPointsTextbookLab – Stats  |
| 3 weeks | DNA | * DNA Review
* Applications of DNA to Forensics
* RFLP, PCR
* MinSTR
* SNP Profiling
* CODIS
* Project Innocence
 |  |  | SUPA PowerPointsTextbookLab – DNA ExtractionLab – Simulated DNA |
| 3 weeks | Serology | * Blood Background
* Blood Chemistry
* Blood Pattern Analysis
* Collecting and Preserving
* Other biological fluids
 |  |  | SUPA PowerPointsTextbookLab – Blood TypingLab – Blood Splatter |
| 3 weeks | Fingerprints | * Fingerprint comparison IAFIS
* Preserving
* Legal Challenges
* Ear and Lip Prints
* Hair and Fiber Analysis
 |  |  | SUPA PowerPointsTextbookLab - Fingerprints |
| 1 week | Autopsy | * Medicolegal Death Investigation
* How autopsies are preformed
* Information Obtained
* Types of trauma
 |  |  | SUPA PowerPointsTextbookLab – PMI and Virtual Autopsy |
| 2 weeks | Anthropology | * Human Skeletal Anatomy
* Facial Reconstruction
* Taphonomy
* Crime Scene Processing
 |  |  | SUPA PowerPointsTextbookLab – No Bones About ItLab – Measurable You |
| 2 weeks | Ecology/Entomplogy | * Forensics Ecology
* Entomology
* Botany
* Palynology
* Mycology and Zoology
* Maggot Rearing
* Timelines
 |  |  | SUPA PowerPointsTextbookLab – Inferring Height from BonesLab - Maggots |
| 2 weeks | Chemical Evidence | * Purification Methods
* GS, LC, HPLC
 |  |  | SUPA PowerPointsTextbookLab – ChromatographyLab - Spectroscopy |
| 1 week | Spectroscopy | * Atomic Spectroscopy
* Molecular Spectroscopy
* Mass Spect.
* Radiochemical Analysis
 |  |  | SUPA PowerPointsTextbookLab - %composition |
| 3 weeks | Toxicology | * Poisons and Toxins
* Medicinal Chemistry
* Drugs of Abuse
* Alcohol Sampling and Analysis
 |  |  | SUPA PowerPointsTextbookLab – BAC  |
| 2 weeks | Arson | * Explosives and Arson Investigations
* Burn Patterns and Accelerates
* GS mass Spect.
 |  |  | SUPA PowerPointsTextbookLab – Flammability of FabricsLab – Footwear Analysis |
| 2 weeks | Physical Evidence (glass, soil, paint) | * Intrinsic and Extrinsic Properties
* Refractive Index
* Types of Glass
* ID Soil
* Proxy Indicators
* Paint and Coatings Analysis
 |  |  | SUPA PowerPointsTextbookLab – Glass AnalysisLab – Secrets of Soil |
| 2 weeks | Ballistics/Firearms | * Types of Guns and Ammo
* Internal, External, and Terminal Ballistics
* Other Impression Evidence
 |  |  | SUPA PowerPointsTextbookLab – Gun Shot ResidueLab – Types of Bullets |
| 2 weeks | Documents | * Forged Documents
* Handwriting Analysis
* Photographic and Video Alterations
* Audio and Linguistics
 |  |  | SUPA PowerPointsTextbookLab – Handwriting Analysis |
| 1 week | Computers/engineering | * Failure Analysis
* Computer and Internet Forensics
* Cybersecurity
 |  |  | SUPA PowerPointsTextbook |
| 2 weeks | Psychology/Profiling | * Victimology
* Interrogations and Interviews
* Eyewitnesses
* Profiling
* Jury Selection
* Psychological Testing
* Brain Functions
 |  |  | SUPA PowerPointsTextbook |
| 1 week | Final Project |  |  |  |  |
| 1 week | Review/Final Exam |  |  |  |  |