



EMPLOYABILITY PROFILE

Forensic Science



Industry Based Skill Standards

Proficiency Definitions
 NA = Not Applicable 1 = Developing 2 = Basic 3 = Proficient 4 = Mastery

	9th	10th	11th	12th		9th	10th	11th	12th
History of Forensic Science					Genetics and DNA Analysis				
Understands the scientific, social, and legal development of Forensic Science. Identify organizations responsible for administrating Forensic Investigation.					Apply blood type analysis to genetic inheritance patterns. Utilize Polymerase Chain Reaction techniques to compare short tandem repeat for DNA Analysis				
Personal and Professional Goal Setting and Success					Measurement & Statistical Analysis				
Defines principles that contribute to personal and professional success. Embody characteristics of a healthy, positive, and successful attitude.					Demonstrate the correct techniques for measurement and collecting data use mathematics to represent physical variables and their relationships, and to make quantitative predictions.				
Effective Communication					Fingerprinting				
Demonstrates effective communication skills verbally and in writing. Collaborates effectively. Understands how to manage workplace conflicts and challenges.					Identify fingerprinting patterns, subclasses, and minutiae. Compare and analyze evidence. Lift a fingerprint from a variety of surfaces using appropriate technique.				
Criminal Justice System (CJS)					Serology & Blood Spatter				
Explains the difference between criminal law and civil law. Identify the major pillars of CJS. Demonstrates knowledge of how the arrest process has impact on the trial process.					Identify bloodtypes, transfer and spatter pattern. Analyze bloodstain patterns based on source, direction, and angle of trajectory.				
Safety and Protection					Anatomical & Skeletal Analysis				
Understands proper safety protocols in the laboratory. Can identify potential safety hazards in the field and explain standard operating procedures on a crime scene.					Identify the major bones in the human skeleton. Interpret markings and conditions to identify sex, age, height, health and injury. Identify major body systems.				
Tools and Equipment					Death Investigation				
Evaluate appropriate methods and/or tools for collecting data. use laboratory tools connected to computers for observing, measuring, recording, and processing data.					Complete an autopsy investigation. Determine the cause of death using evidence from an autopsy. Identify common insects associated with decomposition and diagram their life cycles.				
Crime Scene Investigation					Toolmarks and Ballistics				
Efficiently process a crime scene in a systematic, orderly method. Collect and document evidence to ensure credibility of the investigation.					Explain the individual characteristics of tool marks. Identify characteristics of bullet and cartridge cases. Analyze and evaluate various kinds of toolmark and ballistic evidence.				
Photography & Microscopy					Forensic Toxicology and Chemistry				
Operate photography and microscopic equipment to capture evidence at a macroscopic and microscopic scale. Appropriately handle, focus and operate machinery.					Classify the types of drugs based on the physiological effects on the body. Complete chromatographic, spectroscopic and analytical techniques to identify unknown toxins and substances.				
Research and Inquiry					Forensic Psychology				
Conduct an investigation to produce data. Construct a scientific explanation based on valid and reliable evidence.					Locate and identify the major organs of the nervous system. Identify psychological testing processes and procedures used to study the criminal mind.				

College Credits Attained				
Onondaga Community College CJ 101: Criminal Justice Systems			3 CH	
Syracuse University Project Advance: Forensic Chemistry 113			4 CH	
Onondaga Community College CJ 215: Criminal Law			3 CH	

Inquiry & Research					Year
PSLA/MOST Science Fair					
PSLA/MOST Science Fair					
PSLA/MOST Science Fair					

Work-Based Learning					Hours
Agency: _____					
Agency: _____					
Agency: _____					