# Forensic Science

The following learning targets represent the major concepts studied and assessed in this course.

## Semester 1:

### Unit 1: Evidence
- Accurately measure evidence in either the metric or imperial system.
- Identify what kind of evidence a sample falls under.

### Unit 2: Fingerprints
- Determine fingerprint core type and classification.
- Match fingerprints using special ridge analysis.
- Explain and describe how to take fingerprints.

### Unit 3: Shoe Prints
- Analyze shore prints at a crime scene to determine events and characteristics of individuals involved.
- Use shoe and height data to determine characteristics of a suspect.

### Unit 4: Documents
- Use distinguishing characteristics to evaluate and analyze handwriting.
- Identify written forgery using handwriting analysis techniques.
- Identify paper types using 6 characteristics of paper.
- Calculate Rf values.

### Unit 5: Fiber and Hair Forensics
- Analyze characteristics of hair and fibers under a microscope.
- Describe class characteristics and individual characteristics of hair and fibers.
- Explain the differences between animal and human hair.

### Unit 6: Blood and DNA
- Analyze the use of blood and DNA in forensic investigations.

## Semester 2:

### Unit 7: Blood Spatter
- Calculate the angle of impact based on the measurements of a single drop.
- Use graphed data to determine the height of a single drop.

### Unit 8: Ballistics
- Identify the different parts of a bullet.
- Match striation patterns.
- Determine the trajectory of a bullet.

### Unit 9: Impressions
- Identify different tools impression patterns in different materials.

### Unit 10: Odontology
- Identify each type of tooth structure, location, and function in the jaw.
- Explain the benefits and drawbacks of bite mark analysis.

*Updated 2021--22*

# Forensic Science

## Unit 11: Skeletal Evidence

- Locate and distinguish the major bones in the human skeleton.
- Use mathematical formulas and graphs to estimates a human's height based on bone lengths.
- Use clues and observations to determine the skeleton's sex and age.

## Unit 12: Post Mortem

- Estimate the time of death based on rigor mortis, algor mortis, livor mortis, entomology, stomach contents, and decomposition.

## Unit 13: Eyewitness

- Determine the credibility of eyewitness accounts.
- Use eyewitness accounts to identify evidence in crimes.