

# **Advanced Forensic Investigative Techniques: Identifying the Perpetrator**

**This is a self-paced class with continuous enrollment.**

**Cost: \$25.00**

The goal of most police work is to identify the perpetrator. This entails witness interviews, collection of crime scene evidence, and following the leads derived from these sources. Since most homicides are committed by someone who knows the victim, focusing on those who might have known the deceased or had a motive to harm the victim can narrow the field of suspects considerably. Nevertheless, to tie a potential suspect to a particular crime requires linking him or her to the crime scene evidence. This course focuses on the analysis of crime scene evidence to narrow the search for the perpetrator, and describes the types of expertise that might be employed to identify a likely suspect.

## **Course Requirements:**

[Advanced Forensic Investigative Techniques: Identifying the Victim](http://www.webbycyberclasses.com/IDtheVic)

(<http://www.webbycyberclasses.com/IDtheVic> or <http://class.universalclass.com/coroner5>) is required before taking this course. No text book purchase is required. Online references have been provided. The student is expected to read all 9 lessons. In addition, there are assignments, case studies, and online automations to review in order to get the most benefit from this course.

**WARNING:** Some material presented in this class is of a graphic nature and may be offensive to some students. Viewer discretion is advised.

## **The course will deal at length with the following Topics:**

Lesson 1 – Latent, Patent, and Plastic Fingerprint Detection and Analysis

- Types of Fingerprints and Impressions

- Techniques Suitable for the Crime Scene

- Detecting Fingerprints Using Vacuum Metal Deposition

- Latent and Patent Prints on Skin

- A List of Agents for Fingerprint Development and Their Purposes

- Automated Fingerprint Identification Systems (A.F.I.S.)

- Fingerprint Examiner's Field Kit

- Latent Fingerprint Analysis Flowchart for Untreated Metal and Plastic Films

- Latent Fingerprint Analysis Flowchart for Adhesive, Wax, and Waxed Surfaces

- Latent Fingerprint Analysis Flowchart for Raw Wood and Textured, Nonporous Surfaces

- Latent Fingerprint Analysis Flowchart for Paper, Cardboard, and Smooth, Nonporous, Nonferrous Surfaces

- Flowchart Showing how to Process Human Skin for Fingerprint Evidence

Lesson 2 – Hair Evidence

- Hair Evidence

- Hair Growth Patterns
- Significant Features of Hair
- Microscopic Examination of Hair Evidence
- Determination of Body Region that Was Source of Hair Evidence
- Determination of the Ethnicity of Hair Evidence
- Miscellaneous Information Obtained from Hair Evidence
- Animal Hairs
- Hair Evidence Collection

### Lesson 3 –Fiber Evidence

- Introduction
- Fiber Evidence
- Natural Fibers
- Synthetic Fibers
- Fiber Characteristics
- Crime Scene Investigation
- Protocol for Evidence Processing

### Lesson 4 – Impression Evidence Analysis – Shoe, Tire, and Toolmark Evidence

- What is Impression Evidence?
- Examination of Footwear Impressions
- A Trail of Footprints
- Examination of Tire Tread Impressions
- Collection of Footwear and Tire Tread Impression Evidence
- Casting and Lifting of Impressions
- Examination and Collection of Toolmark Impressions

### Lesson 5 – Body Fluids and Forensic Serology

- What is Forensic Serology?
- The Terminology of Forensic Serology
- Antigen-Antibody Interactions – the Basis of Serology
- Tests to Identify Evidence as Blood
- There is More to Blood Typing than just the ABO Blood Groups
- The Types of Serological Tests
- Genetic Markers in Bloodstains
- ABO Secretors – Determining Blood Type from Other Bodily Fluids

### Lesson 6 – Forensic Odontology – Bite Mark Evidence

- What is Forensic Odontology?
- Introduction to Bitemark Analysis
- The Individuality of Human Dentition
- Bitemark Characteristics
- Collection of Bitemark Evidence
- Collection of Standards from Possible Suspects
- Analysis of Bitemark Evidence
- Terminology Used to Evaluate Bitemark Evidence

Factors Affecting Bitemark Accuracy  
Results of Bitemark Comparison  
Animal and Insect Bitemarks

#### Lesson 7 –DNA Profiling

What is DNA Profiling?  
For What Cases Is DNA Profiling Used?  
Review of Molecular Biology Terminology  
Reviewing the Differences between Nuclear and mtDNA  
Non-coding or ‘Junk’ DNA  
The Types of DNA Evidence Collected at Crime Scenes  
DNA Purification  
Laboratory Analysis of DNA Evidence  
Mitochondrial DNA Analysis  
Animal and Microbial DNA Testing  
The Combined DNA Index System -- C.O.D.I.S.

#### Lesson 8 – Forensic Psychology – Profiling

What Is Criminal Profiling?  
The History of Criminal Profiling  
Inductive Criminal Profiling  
Deductive Criminal Profiling  
Geographic Profiling  
Environmental & Palynological Profiling

#### Lesson 9 – Biometrics – Voice, Ear, and Lip Prints

What is Biometrics?  
Voice Print Identification  
Forensic Tape Enhancement  
Ear Print Identification  
Lip Print Identification

#### **Grading Policy**

A = 100 - 90  
B = 89 - 80  
C = 79 - 70  
D = 69 - 60  
F = 59 - Below

**Students have the opportunity to purchase certificates upon successful completion of the course.**

**This course is worth 2 Continuing Education Units (2 CEUs)**

- A score of 90% and above entitles the student to purchase a **Certificate of Academic Excellence**
- A score of 80-89% entitles the student to purchase a **Certificate of Merit**
- A score of 75% entitles the student to purchase a **Certificate of Appreciation**

**Certificates cost \$25 and can be purchased after completion of the course.**

### **Disclaimer**

This class is for informational or refresher purposes, not certification. It cannot be substituted for any state, government, licensing, or educational requirements.

### **Questions?**

Contact me prior to enrollment at [webbycyberclasses@yahoo.com](mailto:webbycyberclasses@yahoo.com)