

SAN BERNARDINO COUNTY SHERIFF'S DEPARTMENT
LATENT FINGERPRINT DEVELOPMENT
EXPANDED COURSE OUTLINE

I. Introduction

A. Introduction

1. Introduce the instructor
2. Self-introduction of students

B. Course Objectives

1. To provide training for employees who gather latent fingerprints for evidence
2. To develop the student's understanding of latent print collection techniques
3. To develop the student's skill in documenting located latent prints
4. To familiarize the student with equipment needed to collect latent prints

II. Fingerprint Basics

A. What are Fingerprints

1. Development
2. Ridges
3. Minutia

B. Pattern Recognition

1. Loops
2. Arches
3. Whorls
4. Palm

C. Types of Prints

1. Latent
2. Patent
3. Plastic

D. Data Bases

1. AFIS
2. CAL-ID

III. Locating Latent Prints

A. Where to Look

1. Type of crime
2. Point of entry/exit
3. Suspect's location at the scene

B. Visual Search

1. Smudges on smooth surfaces
2. Low angle light
3. Blood or other material

C. Contamination

1. Of the scene from the powder used to collect latent prints
2. Of the collector from the powder
3. Of the scene from the collector's own prints and DNA
4. Of powder by mixing them with each other using the same brush

IV. Basic Equipment/Supplies

A. Brushes

1. Fiberglass
2. Magnetic
3. Feather

B. Lifting Tapes

1. Clear
2. Frosted
3. Specialty (Diff-lift, Gels)

C. Cards

1. White
2. Black

D. Gloves

1. Single use latex
2. Single use non-latex, such as nitrile

V. Powder Development

A. Developing a latent fingerprint using powder

1. Different types of powder develop different types of prints
2. Different types of powder are processed differently after development of print
3. Powder is used to make a latent print visible so it can be collected

B. Types of powder

1. Regular
2. Magnetic
3. Flourescent

C. Regular Powder is best used on smooth surfaces

1. Windows
2. Televisions
3. Table tops
4. Painted surfaces
5. Exterior of vehicles

D. Magnetic Powder is best used on shiny surfaces

1. Plastic containers
2. Styrofoam
3. Rubber

E. Fluorescent Powder is best used on raw surfaces

1. Wood
2. Some countertops

VI. Photograph Fingerprints

A. Equipment

1. Camera
2. Scale
3. Tri-pod

B. Techniques

1. 1:1 ratio
2. Lighting

VII. Fingerprint Collection

A. Latent Prints

1. Preparation procedures
2. Collection procedures

B. Patent Prints

1. Preparation procedures
2. Collections procedures

C. Plastic Prints

1. Preparation procedures
2. Collection procedures

VIII. Testimony

A. Know the Procedures You Used

1. Maintain standards
2. Maintain consistency
3. Use industry standards

B. Educate the Jury

1. Understand your procedure so you can explain it
2. Use simple language to explain the process

LEARNING ACTIVITY- The students will be given an item as evidence. The students will work collaboratively to examine the evidence and determine the best course of action to collect a fingerprint. Together the students will select the proper equipment and lift a fingerprint from the evidence.

There will be three rounds of fingerprint evidence provided to the students to process. The student will practice locating and lifting a fingerprint from an empty soda can, an empty water bottle, and an empty drinking glass. The fingerprint cards will be prepared and examined by the students in a different group for peer evaluation on the quality of the prints that were lifted.

IX. Course Review and Evaluation

A. Discussion of learning activity result.

1. Students will discuss techniques they learned for latent print collection
2. Students will discuss which supplies worked best for lifting latent prints
3. Students will discuss how item type determined the location of the latent prints

B. Evaluation

1. Students will complete an evaluation on the class
2. Students will complete an evaluation on the instructor