

Fingerprinting

Facilitator Guide

Session Overview

Introduction & Learning Objectives	05m
GROUP EXERCISE – Fingerprinting Basics	45m
Break	10m
GROUP EXERCISE – Evidence Lab Practical	45m
Questions / Wrap Up	05m
End of Session/ Break	10m

Total Session Time: 2 hours

This particular session focuses on:

- *Fingerprinting*

Facilitators Needed: 1(CI) + 1 Latent Print Tech from Outside Source

Locations:

- *Classroom & Fingerprint Lab*

Materials Needed:

- *Easel Board & Markers*
- *WSP Forensic Evidence Book*
 - *Fingerprint Cards*
- *Fingerprint Supplies*
 - *Fingerprinting Ink*
 - *Black Powder*
 - *Brushes*
 - *Lift Tape*
 - *Print Cards*
 - *Items to Lift Prints From*

Students Should Already Have:

- *Notebooks*
- *[THUMB DRIVE]*
- *Book (44 pages) – Fingerprints for Dummies*
- *Study Session – Fingerprinting Basics*



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Learning Objectives:

- Identify the three different types of fingerprint patterns.
- Complete a fingerprint card with all required information.
- Explain what elimination prints are and the importance of them.
- Demonstrate the proper method of rolling inked finger prints.
- Describe what rolled and flat prints are on the fingerprint card or LiveScan machine.
- Demonstrate proper method of lifting fingerprints from a non-porous item.
- List various forms of print development and preservation.
- List what characteristics are found in fingerprints.



NOTE TO FACILITATOR - Introduction (5 min)

- **Brief intro into fingerprints (Some things to cover)**
 - At the end of each finger exist a unique arrangement of small lines called friction ridges - in between these ridges are sweat pores.
 - When the sweat mixes with body oils or dirt, this will rub off onto any surface the finger touches, leaving behind a print if the surface is smooth.
 - A person's friction ridges are formed before birth and stay with them their entire life - THESE DO NOT CHANGE.
 - No two people have the same fingerprint, not even identical twins.
 - If fingerprints are found at a crime scene, they can be invaluable - don't make the assumption that fingerprints are always found at a scene or if they are that means an arrest will be made. Fingerprints are only valuable if the person that they belong to are in the database.



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GROUP EXERCISE - FINGERPRINTING

TIME: **45 min** (20m student group exercise/ 25m presentation)

MATERIALS NEEDED: WSP Forensic Book, Easel Board and Markers, Students Study Session

- Students will prepare a 5 minute presentation on their assigned topic. Easel board is acceptable for this assignment.

SQUAD 1:

1. What are prints used for?
2. Why is fingerprint evidence so important?
3. What is a “ridge” structure?
4. What are the fingerprint pattern types?

SQUAD 2:

1. What unique characteristics can be found in ridge detail?
2. What is Live Scan?
3. What does AFIS stand for and what is it?
4. What are the various types of latent prints?



SQUAD 3:

1. Which factors inhibit finding/ collecting latent prints?
2. What are the various surface types and explain?
3. What are elimination prints and provide an example?

SQUAD 4:

1. What are “major case prints”?
2. How are latent prints destroyed?
3. What should a law enforcement officer have in a quality fingerprint kit?

SQUAD 5: (WSP Forensic Services Guide)

1. Collecting, handling, & packaging of latent prints
2. Lift Cards
3. Precautions

NTF: Walk around the various squads and ensure they are on the right track with obtaining answers to the material. Remind students they can use their mod material as well as the internet.



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NOTE TO FACILITATOR

The following key points should be hit from each squad:

SQUAD 1:

- Prints put suspect at the scene.
- Prints can identify an unknown subject.
- Positive evidence of a person's identity.
- No two fingerprints are the same.
- Ridge structure - the unique lines on each human finger.
 - Fingerprint pattern types - (loops - whorls - arches) - used by latent print tech's only.

SQUAD 2:

- Characteristics found in ridge detail: crossover, arc, island, delta, pore, bifurcation, etc.
- Live Scan - machine used to capture fingerprints digitally.
 - Discuss Live Scan briefly only if squad does not cover it.
- AFIS - computerized system capable of matching, reading, classifying and storing prints for criminal justice agencies.
- Various types of latent prints - palm, lips, foot, toe.

SQUAD 3:

- Factors inhibiting finding/ collecting latent prints - weather, cops, firefighters.
- If not covered by squad, discuss what can be done with a vehicle that is covered in snow but needs to be dusted for prints.
 - Letting snow melt, vehicle dry then dust.
- Porous vs Non Porous surfaces
 - Discuss which surface is easier to lift prints from. Provide example of each if squad does not cover this.
- Elimination Prints.

SQUAD 4:

- Major case prints - Records all friction ridge detail to include: fingers, fingertips, finger joints, edge of fingers and palms.
 - Most often done via ink.
- Latent prints are destroyed by carelessness, inexperience in lifting etc.
 - Discuss measures to take to reduce the chances of prints being destroyed.
- Black powder, brush, lift tape, lift cards, cotton gloves, ink pad.

SQUAD 5:

- Two types of surfaces in which prints can be developed:
 - Hard, smooth, and non-absorbent.
 - Smooth, absorbent and porous.
- Non-absorbent surfaces better to develop and lift prints.
- Fingerprints on paper can be packaged together, will not be destroyed.
- Discuss proper way to fill out lift card.
- If the officer accidentally gets their own prints on the tape, just cross it out with an "X"



BREAK



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GROUP EXERCISE: Fingerprint Lab Practical (45 min)

Materials Needed: Fingerprint Cards & Ink
Lift Cards
Fingerprint Tape
Black Powder & Brushes
Items to lift prints from (i.e. glass cups, plates, vases, etc)

Students should move to the Fingerprint Lab (Rm E107) and use the remainder of class time to practice lifting prints and rolling prints. Facilitator will demonstrate the proper technique for lifting a latent print from an item and rolling their own fingerprint. Students should then practice in pairs.

NTF: First student should leave their fingerprints on an item, such as a glass cup. The second student will practice lifting their partner's prints from the item, while the first student practices rolling their own prints using ink and fingerprinting cards. Walk around class, ensuring students are not using too much or too little powder/ink, and using proper precautions. Once the second student has properly completed 2-3 lift cards, they will switch roles and materials.

Allow at least 10 minutes for clean-up.



BREAK/END OF SESSION

