

# **Capstone Project Teaching Certificate Program**

**James A. Bailey**

**2005 - 2006**

# Capstone Project

**My capstone project involves active learning for a law enforcement course**

**Course:**

**Fingerprint Identification**

**LAWE 491**

# Purpose

The purpose of this capstone project is to develop an active learning class exercise that simulates a real life investigative problem in fingerprint identification.

Students generally prefer to study real cases compared to theoretical or fictitious problems.

# Theoretical / Fictitious Cases

Ordinarily, students are presented with a theoretical or fictitious partial latent fingerprint and asked to compare it to sets of inked impressions.

Students are initially eager to compare partial latent prints to known inked impressions; however, they soon lose interest after a few comparisons.

# Early Symptoms of Poor Motivation



Early in the Semester

# Active Learning

When students are actively involved in learning they are more interested in their class assignments.

It is a challenge to create active learning assignments and exercises for class. One learning exercise involves student participation in collecting prints.

# Student Participation in Printing



# Latent Print Comparisons

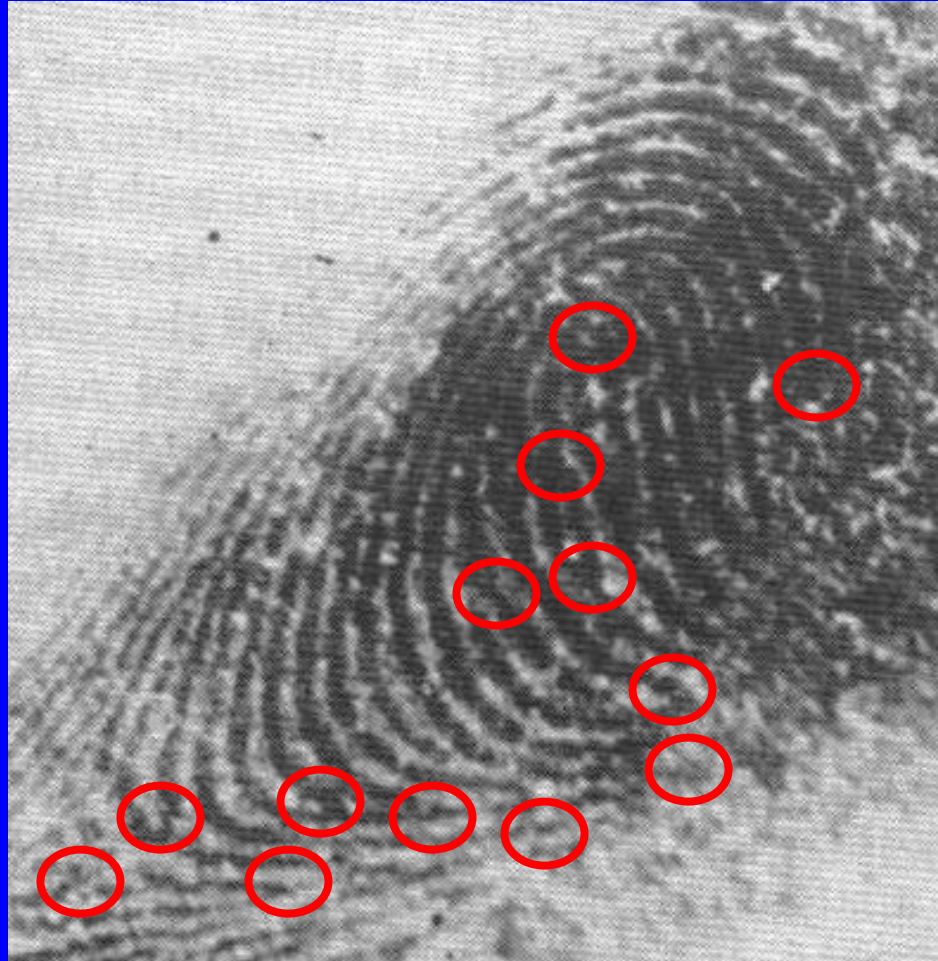
Comparisons of latent impressions is initially a challenge; however, as students study and practice fingerprint comparisons, they become more skilled and motivated to analyze more difficult latent impressions.

# Unidentified Latent Print



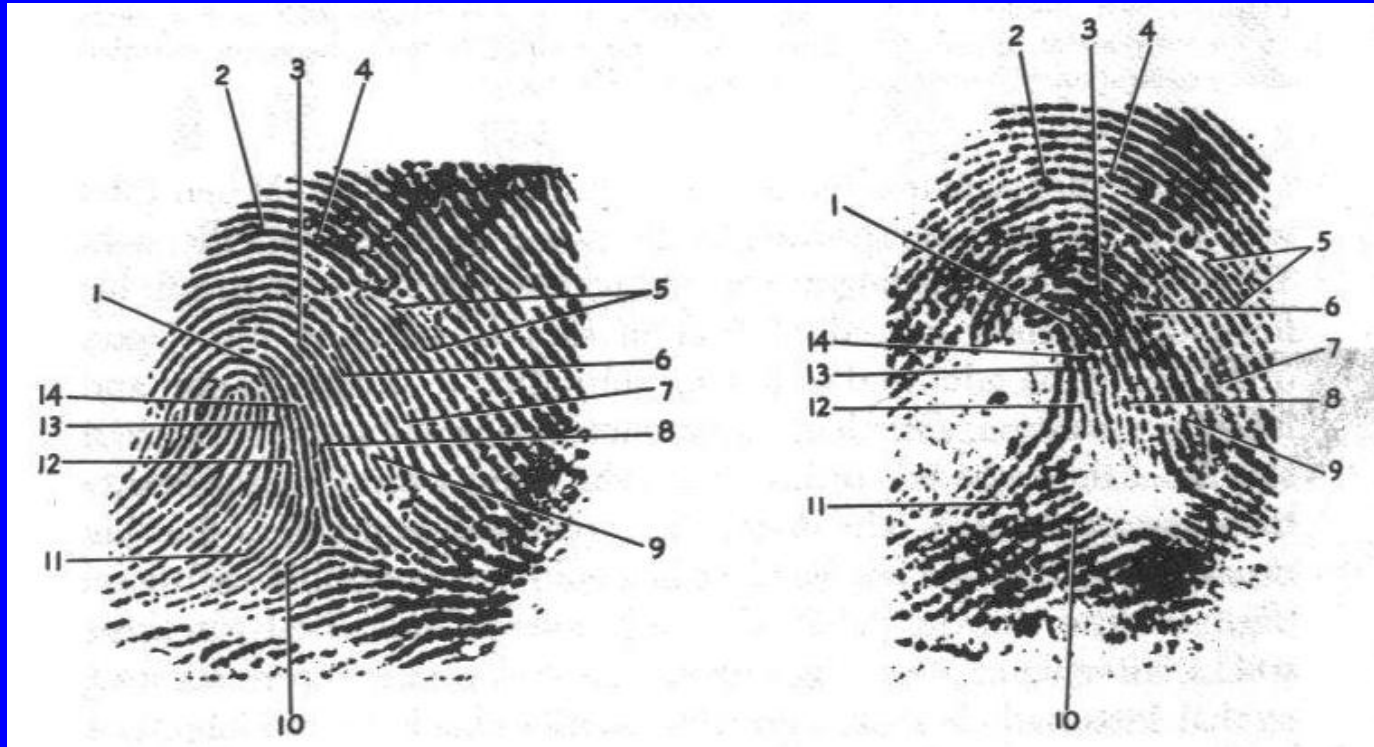
**This is a typical unidentified print given to students for analysis.**

# Study Ridge Minutiae



Not all latent prints are of excellent quality for analysis.

# Latent Print Comparison



**Inked Impression**

**Latent Print**

**Students learn to identify latent print comparisons that involve matching ridge minutiae on a latent print to an inked impression.**

# Real Cases Add Interest

Motivation is reinforced when students compare latent print cases from real investigations especially from high profile cases.

The students are given details of a real investigative case and a fingerprint associated with a case to analyze.

# Fingerprint Case

Spanish police found a latent fingerprint on a plastic bag of detonators from a March 11, 2004 series of 10 bombings which killed 191 and injured about 2000.

Within a week of the bombings, a digital photograph of the fingerprint was given to the FBI.

# Fingerprint Analysis

The print was analyzed by FBI agents in early April. However, the Spanish police didn't agree with the FBI's match.

When the FBI checked the actual image against the inked impression they recanted their analysis and admitted to making an erroneous identification.

# Brandon Mayfield Case

**FBI apologizes to lawyer who was held in Madrid bombings.**



**Brandon Mayfield at Press Release**

# Final Evaluation

As part of the final evaluation, students will be given copies of the latent fingerprints found in Spain on the plastic bag that contained the detonators with inked impressions from Daoud and Mayfield for comparison.

# Evaluation Pending

The students have become familiar with the case and are looking forward to the challenge of analyzing the fingerprints and identifying the characteristics of the latent prints in the Madrid tragedy.

**Any Questions?**