

**Raleigh/Wake City-County  
Bureau of Identification  
Crime Laboratory Division**

**LATENT PRINT UNIT FORENSIC TECHNICIAN TRAINING  
MANUAL**



Raleigh/Wake City-County Bureau of Identification  
Latent Print Unit Forensic Technician Training Manual

Issued: October 16, 2014  
Issued By: CCBI Director

Chapter: LPUFTTM1  
Version: 2

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## Introduction:

Refer to Laboratory Administrative Procedure 22: Training Programs.

All training activity and results will be recorded by the Principal Instructor and the Trainee in the FT Training Checklist as well as attest that the required readings have been accomplished. The Principal Instructor will maintain a training file containing all training materials.

~~The above curriculum and the following modules are an outline of the minimum requirements of the Forensic Technician Training Program. The Trainer may require additional exercises, provide other lectures, and afford the student other training opportunities outside the above listed outline. In such instances, the Trainer will note any additions to this program on the training record of the student. All instructors of this training program must possess the knowledge, skills and abilities for the course being instructed.~~

~~The methods of assessment/s can be in oral, written or demonstrative form. All results will be recorded by the Trainer and the Trainee in the FT Training Checklist as well as attest that the required readings have been accomplished. The Trainer will maintain a notebook (portfolio) of all training materials. Competency must be exhibited in each of the assessments by performing, understanding, thinking and communicating each delineated and quantitated assignment.~~

~~The successful completion of each module in every section is necessary before proceeding to the next section and phase of the training program. The training program can be broken down into various phases, sections, and modules. Phase 1 of the training program consists of Sections 1-4, and Phase 2 of the training program consists of Sections 5 & 6. Within each section a series of training modules exist. Phase 1 of the training program consists of Sections 1-5, Phase 2 consists of section 6, and Phase 3 of the training program consists of Section 7.~~

~~With regard to assessing the Trainee's current skill level, a comprehensive review of the Trainee's experience and previous training, if any, must occur. If the Trainee can successfully demonstrate competency based off previous experience, the Trainer may apply an abbreviated training session and for each applicable section and module. The Trainee, however, will have to demonstrate competency at the end of each training section in order to become authorized to complete casework.~~

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~~The training period for Phase 1 is estimated at approximately 1-2 months, which is dependent upon various factors that include, but are not limited to: the Trainee's experience, skill level, comprehension, and overall response to the training program.~~

~~The training period for Phase 2 is estimated at a minimum of 4 weeks. The training period for Phases 2 & 3 is a minimum of 4 weeks each.~~

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## PHASE 1

### SECTION 1

#### Module 1.1: Laboratory Orientation ~~and Training Assessment~~

##### ~~Training~~ Learning Objectives:

An understanding of the administrative process and functions of the Raleigh/Wake City-County Bureau of Identification.

An understanding of the historical background and creation of the Raleigh/Wake City-County Bureau of Identification.

An understanding of the organizational structure of the CCBI to include chain-of-command, lines of communication, and applicable administrative forms (time sheets, leave forms, etc.)

An understanding of the services offered/performed by the various sections of the CCBI and the interactive sequencing protocol for cross-over examinations with latent prints.

An understanding of the geographical layout of the facility and the laboratory in which the facility is located.

An understanding of the structure of the CCBI Forensic Technician training process and the expected goals of the program.

~~An assessment of the level of training that will be necessary for reaching competency as independent case working Forensic Technician.~~

##### Method of Testing ~~Training Objectives~~:

~~Oral examination by the Principal Instructor~~ Practical demonstration of knowledge of the CCBI system (including LP training program) as related to its history, organization, administration, and the forensic services it provides.

~~Assess the Trainee's current skill level and determine the most appropriate course of training to attain competency.~~ —

##### Training Methods Assignments:

- 1) Oral discussion with the Principal Instructor ~~Attend a lecture relating to an overview of covering~~ the historical establishment of the CCBI system, its present organizational

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structure, and administrative staff ~~to include all training objectives for module 1.1. The discussion lecture will include focus on~~ the individual LP Trainee's ~~and his/her~~ role and responsibilities in the agency and the LP training program.

- 2) The Trainee will undergo a rotation assignment with each section of the CCBI for familiarization with the services provided by each section and their relationship to latent print examinations.

- ~~3) The Trainee, Trainer, and Forensic Supervisor will review the Trainee's previous experience and training in latent print matters, and develop the most appropriate course of training.~~

Required Reading:

- 1) CCBI Crime Laboratory Administrative Procedures (Introduction)
- 2) CCBI Crime Laboratory Quality Manual (Introduction)
- 3) CCBI Latent Print Unit Technical Procedures (Introduction)
- 4) 1937 Law establishing CCBI
- 5) CCBI Latent Print Unit Forensic Technician Training Manual
- 6) CCBI Standard Operating Procedures (Introduction)

Estimated Training Time: 10 (ten) days

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## Module 1.2: Operational Procedures

### Training ~~Learning~~ Objectives:

An understanding of applications of the CCBI Policy and Procedure in the operation of a forensic science laboratory.

### Method of Testing ~~Training Objectives~~:

Oral examination on the training objectives by the Principal Instructor ~~Exhibition of operational and comprehensive general orders and bylaws as delineated in CCBI Operational Procedures.~~

### Training Methods ~~Assignments~~:

- 1) ~~Oral discussion Attend a lecture~~ and demonstration by the Principal Instructor on the use of personal computers in the CCBI system as related to operation, e-mail, Internet usage, and programs specific to the discipline of fingerprint science.

### Required Reading:

- 1) CCBI Crime Laboratory Administrative Procedures (Cont.)
- 2) CCBI Crime Laboratory Quality Manual (Cont.)
- 3) CCBI Latent Print Unit Technical Procedures (Cont.)
- 4) ~~CCBI Standard Operating Procedures (Cont.)~~

Estimated Training Time: 10 (ten) days continued from Module 1.1



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### Module 1.3: Crime Laboratory Safety Procedures

#### Training ~~Learning~~ Objectives:

An understanding of the safety procedures and practices in the CCBI Crime Laboratory.

#### Method of Testing ~~Training Objectives~~:

Oral examination on the required reading by the Crime Laboratory Health and Safety Officer  
~~Ability to demonstrate safety practices/procedures as delineated in the CCBI Safety Procedure Manual.~~

Demonstrate retrieval of an MSDS.

#### Training Methods ~~Assignments~~:

- 1) Oral discussion with the Crime Laboratory Health and Safety Officer ~~Attend a lecture~~ about laboratory safety practices and procedures.
- 2) Research ~~and /write/communicate~~ a paper relating the importance of laboratory safety and how it is practiced at CCBI.

#### Required Reading:

- 1) CCBI Crime Laboratory Health and Safety Manual
- 2) Wake County Safety, Security and Loss Prevention Manual
- 3) Material Safety Data Sheets for materials used in the Latent Print Unit.

Estimated Training Time: 3 (three) days

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## Module 1.4: Evidence Management

### Training ~~Learning~~ Objectives:

An understanding of physical evidence and its: origin; collection; containers; handling; integrity; labeling; packaging; preservation; proof of custody; safety; sealing; and routing/storage.

An understanding and demonstration of appropriate evidence data entry to include: item description(s); item # generation, lab services requested.

An understanding of CCBI evidence receiving and handling practices.

An understanding of inputting information into RMS database system, and various evidence tracking mechanisms.

Knowledge of required CCBI documentation (electronic/paper) requirements necessary to reflect case records (addenda, corrections, phone logs, etc.).

### Method of Testing ~~Training Objectives~~:

Demonstrate, under the direct supervision of the Principal Instructor, the proper evidence receipt, documentation, inventory, labeling, packaging, marking and storage for a total of at least thirty cases. ~~An understanding of the receiving and handling of evidence items. Topics to include: receipt; inventory; labeling; packaging; safety practices; and storage.~~

~~An understanding and demonstration of appropriate evidence data entry to include: item description(s); item # generation, lab services requested.~~

~~Practical demonstration of knowledge of required CCBI documentation (electronic/paper) requirements necessary to reflect case records (addenda, corrections, phone logs, etc.).~~

### Training Methods ~~Assignments~~:

- 1) ~~Discussion with the Principal Instructor consisting of~~ Attend a lecture relating to an overview of latent print evidence inclusive of: case type; packaging; case protocol depending on case type and case history; general receiving procedure; general evidence receiving, labeling, storing and packaging after receipt; receipt of additional evidence in an existing case; evidence release; and generation of Latent Print Unit internal case paperwork.
- 2) ~~Demonstration by the Principal Instructor of receipt of new cases from the main evidence vault, transfer to the Latent Print Unit and assignment to the Latent Print Unit.~~

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- 3) Under the direct supervision of the **Principal Instructor ~~Trainer~~**, the Trainee **will ~~may~~** **~~begin to~~** receive **at least thirty (30)** new cases from the Main Evidence Vault and sign them into the Latent Print Unit utilizing proper protocol and procedure for evidence receiving and handling. Assign these cases into the Latent Print Unit accordingly.
- 4) Research **and ~~/write/communicate~~** a paper relating the consequences of improper evidence handling as it relates to court. Reference examples of court cases in which improper evidence handling had a negative adverse effect in the courts.

Required Reading:

- 1) Saferstein, R. (1998). Criminalistics: An Introduction to Forensic Science, 8th (Ed.), Chapters 1 & 3.

**Estimated Training Time: 5 (five) days**

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## SECTION 2

### Module 2.1: The Anatomy of Friction Ridge Skin

#### Training ~~Learning~~ Objectives:

An understanding of basic anatomy and terminology of the hands and feet as applicable to friction ridge skin identification.

An understanding of the biology and physiology of friction ridge skin.

An understanding of the contributions of human secretion glands and external contaminants to latent prints and their subsequent development.

An understanding of the general chemical composition of human sweat.

An understanding of the development and permanent nature of scars on friction ridge skin, and the temporary nature of superficial skin injuries.

An understanding of various diseases that affect the development of friction ridge skin.

#### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on ~~Practical interpretation of~~ anatomical terms related to the hands and feet, the morphological development of friction ridge skin, the role of general secretion glands and their organic or inorganic contribution to latent print residue, and natural and non-natural issues affecting friction ridge skin.

#### Training Methods ~~Assignments~~:

- 1) ~~Discussion with the Principal Instructor Attend a lecture~~ on the formation of friction ridge skin with emphasis placed upon morphology, basic anatomical features, and terminology related to the hands and feet.
- 2) ~~Discussion with and demonstration by the Principal Instructor Attend a lecture /demonstration~~ of the principle function of eccrine, apocrine and sebaceous glands and their organic and inorganic components in latent print residue.
- 3) ~~Discussion with the Principal Instructor Attend a lecture~~ on the issues involved with scar formation, friction ridge skin mutilation, and diseases affecting friction ridge skin.

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- 4) Research ~~and /write/communicate~~ a paper on true examples of instances in which individuals have attempted to mutilate their friction ridge skin to prevent identification. Reference a minimum of three (3) specific cases.

Required Reading:

- 1) Olsen, R. D. (1978). Scott's Fingerprint Mechanics, Pages 115-120.
- 2) Ashbaugh, D. (1999). Quantitative-Qualitative Friction Ridge Analysis: An Introduction to Basic and Advanced Ridgology, Chapters 3,4 & 5.
- 3) DeForest, P., Gaensslen, R., Lee, H. (1983). Forensic Science: An Introduction to Criminalistics, Chapter 12.

**Estimated Training Time: 3 (three) days**

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## Module 2.2: Friction Ridge Pattern Recognition and Interpretation

### Training ~~Learning~~ Objectives:

An understanding fingerprint and palm print pattern recognition and interpretation.

### Method of Testing ~~Training Objectives~~:

Successful completion (100% accuracy) ~~Operational demonstration~~ of friction ridge pattern recognition exercises (seen training methods below) using ~~and its~~ appropriate descriptive terminology.

### Training Methods ~~Assignments~~:

- 1) ~~Discussion with the Principal Instructor Attend a lecture~~ on the various methods of recognizing fingerprint and palm print friction ridge.
- 2) Complete pattern recognition exercises on a minimum of fifty (50) copies of 10-print cards, indicating each fingerprint pattern and various palm print patterns utilizing the appropriate descriptive terminology.

### Required Reading:

- 1) Federal Bureau of Investigation. (1984). The Science of Fingerprints, Chapters 2-8.
- 2) DeForest, P., Gaensslen, R., Lee, H. (1983). Forensic Science: An Introduction to Criminalistics, Chapter 12.
- 3) Cowger, J. (1983), Friction Ridge Skin: Comparison and Identification of Fingerprints, Chapter 3.

**Estimated Training Time: 5 (five) days**

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### Module 2.3: Known Standards – Methods for Recording Friction Ridge Skin

#### Training ~~Learning~~ Objectives:

An understanding of the methodologies of recording known friction ridge standards and the associated benefits of obtaining elimination prints.

An understanding of the biographical and evidentiary value of completed known standards.

#### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on the training objectives.

Successful completion (100% accuracy) of items 3 – 8 under Training Methods. ~~Practical exhibition of the recording of finger, foot and palm prints (major case style prints).~~

~~Comprehensive application of the use of different various print recording methods.~~

#### Training Methods ~~Assignments~~:

- 1) ~~Discussion with and demonstration by the Principal Instructor~~ ~~Attend a lecture~~ ~~/demonstration~~ on proper techniques and equipment used in obtaining legible major case style fingerprints, palm prints, and footprints.
- 2) Demonstration ~~by the Principal Instructor~~ of the various methods for friction ridge skin recording: fingerprint powder and contact paper, ink, livescan, and Mikrosil.
- 3) Record at least two (2) complete sets of inked finger, tip finger, joint finger, and palm prints utilizing ink.
- 4) Record at least two (2) sets of finger and palm prints utilizing fingerprint powder.
- 5) Record at least one (1) set of inked foot prints, and one (1) set of foot prints collected by fingerprint powder and contact paper.
- 6) Record at least three (3) fingerprints utilizing Mikrosil.
- 7) ~~Under the direct supervision of the Principal Instructor~~, utilize the LiveScan to assist with public fingerprinting for at least 3 individuals.
- 8) Locate in archives three (3) examples each of poorly recorded finger/palm print standards and incomplete finger/palm print standards, and provide a brief description of what is wrong with each example and an appropriate correction.

#### Required Reading:

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- 1) Cowger, J. F. (1992). Friction Ridge Skin: Comparison and Identification of Fingerprints, Pages 8-28.
- 2) Olsen, R. D. (1978). Scott's Fingerprint Mechanics, Pages 56-84 & 90-101.
- 3) Federal Bureau of Investigation. (1984). The Science of Fingerprints, Chapters 9 & 10.

**Estimated Training Time: 5 (five) days**



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## Module 2.4: Post-Mortem Print Collection Methods

### Training ~~Learning~~ Objectives:

An understanding of methods of recording known friction ridge standards from the deceased while practicing personal protection from exposure of biological hazardous matter.

An understanding of friction ridge skin conditions from early to advanced decomposition as well as the affective associative environmental factors.

### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on the training objectives.

Successful completion (100% accuracy) of item 2 under Training Methods. ~~Comprehensive application of recording post-mortem prints using conventional inking and powder application methods while employing proper laboratory safety procedures to prevent exposure of biological hazards.~~

~~Conceptual understanding of obtaining known prints from hands and feet of deceased in varying stages of decomposition.~~

### Training Methods ~~Assignments~~:

- 1) Discussion with and demonstration by the Principal Instructor ~~Attend a lecture~~ ~~/demonstration~~ on proper collection techniques, safety precautions, and equipment used in obtaining legible post-mortem fingerprints, palm prints and footprints.
- 2) Under the direct supervision of the Principal Instructor, record at least two (2) sets of finger and palm prints of individuals either deceased or simulating death, using various recording methods discussed in Module 2.4.
- 3) Research and ~~/write/communicate~~ a paper on the various stages of the decomposition of skin after death.
- 4) Oral presentation - practice of personal and laboratory safety techniques inclusive of the use of personal protective equipment.

### Required Readings:

- 1) Cowger, J. F. (1992). Friction Ridge Skin: Comparison and Identification of Fingerprints, Pages 28-33.
- 2) Olsen, R. D. (1978). Scott's Fingerprint Mechanics, Pages 84-89.

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3) Federal Bureau of Investigation. (1984). The Science of Fingerprints, Chapter 11.

Estimated Training Time: 3 (three) days

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## SECTION 3

### Module 3.1: Introduction to Latent Prints

#### Training ~~Learning~~ Objectives:

An understanding of the general chemical composition of human sweat as a means of understanding the composition of latent print residue and the infinite variables precluding “age” determination of latent prints in almost all instances.

An understanding of the potential for loss, contamination, and destruction of other types of forensic evidence when more than one section/discipline process the same item of evidence.

Ability to interpret the processes of leaving latent print deposits to include parameters of analytical interpretations (age, gender, race).

An understanding of the professional duties, ethics, and moral obligations of Forensic Technicians.

#### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on the training objectives. ~~Practical interpretation of the processes of leaving latent print deposits to include parameters of analytical interpretations (age, gender, race).~~

~~Conceptual understanding of the potential for the destruction of an evidence item by multiple processing techniques.~~

~~Conceptual understanding of duties, ethics, and moral obligations of Forensic Technicians.~~

#### Training Methods ~~Assignments~~:

- 1) ~~Discussion with and demonstration by the Principal Instructor~~ ~~Attend a lecture~~ ~~/demonstration~~ which relates theoretical principles involved in the leaving of latent print residue along with the parameters of latent print analyses.
- 2) Research ~~and compile~~ ~~/write/communicate~~ data collected from at least six (6) different references relating to factors contributing to the leaving of latent print residue.

#### Required Reading:

- 1) Olsen, R. D. (1978). Scott's Fingerprint Mechanics, Pages 111-125.

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- 2) Cowger, J. F. (1992). Friction Ridge Skin: Comparison and Identification of Fingerprints, Pages 72-76.
- 3) Gaensslen, R., Lee, H. (1994). Advances in Fingerprint Technology, Chapters 3,4, and 5.
- 4) Federal Bureau of Investigation. (1984). The Science of Fingerprints, Chapter 13.

**Estimated Training Time: 4 (four) days**

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### Module 3.2: Introduction to Latent Print Processing

#### Training ~~Learning~~ Objectives:

An understanding of the processes of latent print development techniques applicable to varying surfaces and factors that may be associated with evidence.

Conceptual understanding of the constituents of latent print residue, host surface structure, environmental factors, and associated features that dictate the development technique to be employed and/or sequenced with others

#### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on the training objectives. ~~Conceptual understanding of the constituents of latent print residue, host surface structure, environmental factors, and associated features that dictate the development technique to be employed and/or sequenced with others.~~

#### Training Methods ~~Assignments~~:

- 1) ~~Discussion with and demonstration by the Principal Instructor~~ ~~Attend a lecture~~ ~~/demonstration~~ on the influence of contributing factors (surface, temperature, humidity, latent print residue composition and other variables) in relation to development and recovery of latent prints.
- 2) Research ~~and compile~~ ~~/write/communicate~~ data collected from at least (6) different references relating to processing sequencing in relation to latent print residue present on items which have been exposed to adverse conditions.

#### Required Reading:

- 1) Gaensslen, R., Lee, H. (1994). Advances in Fingerprint Technology, Chapters 3,4, and 5.

Estimated Training Time: 3 (three) days

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### Module 3.3: Basic Powder Development Methods

#### Training ~~Learning~~ Objectives:

An understanding of the composition of powder used to develop latent prints of varying surfaces and the safety practices necessary in that use.

An understanding of the development and preservation process of latent prints utilizing different methods of powder application to varying types of physical evidence.

Ability to utilize latent print powder development techniques inclusive of the use of: fiber glass brush; magnetic wand; feather duster; long-hair brushes; clear lifting tape; frosted lifting tape; rubber lifters; hinge lifters; and latent lift cards.

#### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on the training objectives.

Successful completion (100% accuracy) of item 3 under Training Methods. ~~Practical exhibition of latent print powder development techniques inclusive of the use of: fiber glass brush; magnetic wand; feather duster; long hair brushes; clear lifting tape; frosted lifting tape; rubber lifters; hinge lifters; and latent lift cards.~~

#### Training Methods ~~Assignments~~:

- 1) ~~Discussion with and demonstration by the Principal Instructor~~ ~~Attend a lecture~~ ~~/demonstration~~ on the different types of powders, brushes and applicators, lifting mediums, and application techniques available for latent print processing of physical items (fiber glass brush; magnetic wand; feather duster; long-hair brushes; clear lifting tape; frosted lifting tape; rubber lifters; hinge lifters; and latent lift cards). Lecture will include the proper marking (documentation) of necessary information on the lift mounting medium. Lecture will include discussion on the pharmacology of powders and appropriate safety practices used during their application in the laboratory.
- 2) ~~Discussion with and demonstration by the Principal Instructor~~ ~~Attend a lecture~~ on proper marking and documentation required on each lift card.
- 3) ~~Under the direct supervision of the Principal Instructor~~ develop and lift twenty (20) latent prints each from a smooth, non-porous, curved surface (mock evidence) using various powders and collection materials as referenced above. Each lift should be placed on the appropriate-colored latent lift card and correctly labeled.

#### Required Readings:

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- 1) (1978). Scott's Fingerprint Mechanics, Pages 114-139, 161-171, 209-235 & 369-395.
- 2) Cowger, J. (1983), Friction Ridge Skin: Comparison and Identification of Fingerprints, Pages 76-93.
- 3) Lee, H. & Gaensslen, R. (1994). Advances in Fingerprint Technology, Pages 60-65.
- 4) Federal Bureau of Investigation. (1984). The Science of Fingerprints, Chapter 14.
- 5) Saferstein, R. (1998). Criminalistics: An Introduction to Forensic Science, 8th (Ed.), Pages 417-429.

**Estimated Training Time: 5 (five) days**

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## SECTION 4

### Module 4.1: Recognition and Orientation of Friction Ridge Skin

#### Training ~~Learning~~ Objectives:

An understanding of the structure of friction ridge skin on the fingers, palms, and soles of feet inclusive of delta formations, flexion creases, ridge flow, patterns, and anatomical regions.

An understanding of the proper orientation of fragmentary latent prints.

Ability to interpret fingerprint patterns.

Ability to interpret ridge flow, ridge formations, patterns, and creases to determine value and orientation of fragmentary latent palm prints

#### Method of Testing ~~Training Objectives~~:

Oral examination by the Principal Instructor on the training objectives.

Successful completion (100% accuracy) of items 2 - 4 under Training Methods. ~~Practical demonstration of fingerprint pattern interpretation.~~

~~Practical interpretation of ridge flow, ridge formations, patterns, and creases to determine value and orientation of fragmentary latent palm prints.~~

#### Training Methods Assignments:

- 1) ~~Discussion with and demonstration by the Principal Instructor~~ ~~Lecture /demonstration~~ on analysis of fragmentary latent finger, palm and footprints to determine value for comparison and interpreting ridge flow and other “clues” within the latent print to determine originating area of the finger, palm, or foot and the proper orientation.
- 2) Interpret~~ation of~~ fingerprint patterns present on twenty (20) fingerprint standards.
- 3) Using the appropriate terms, highlight and label twenty (20) inked palm prints.
- 4) Analyze fifty (50) latent impressions collected from a variety of surfaces. Determine if the impression is:
  - a. From friction ridge skin?
  - b. Friction ridge skin of value for database searching?



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- c. Specify the anatomical origin of the latent print.

Required Reading:

- 1) Olsen, R. D. (1978). Scott's Fingerprint Mechanics, Pages 24-46.
- 2) Cowger, J. F. (1992). Friction Ridge Skin: Comparison and Identification of Fingerprints, Pages 58-70 & 152-172.
- 3) Ashbaugh, D. (1999). Quantitative-Qualitative Friction Ridge Analysis: An Introduction to Basic and Advanced Ridgology, Chapter 8.

**Estimated Training Time: 3 (three) days**

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## Module 4.2: Automated Fingerprint Identification Systems (SPEX, AFIS)

### Training ~~Learning~~ Objectives:

An understanding of the operation relating to automated fingerprint identification systems utilized in the Latent Print Unit.

### Method of Testing ~~Training Objectives~~:

Successful completion (100% accuracy) of item 2 under Training Methods. ~~Operational exhibition of AFIS database systems as related to latent print inquiries/searches.~~

### Training Methods ~~Assignments~~:

- 1) Discussion with and demonstration by the Principal Instructor ~~Attend a lecture~~ ~~/demonstration~~ on the use of each of the AFIS systems utilized in the Latent Print Unit.
- 2) Under the direct supervision of the Principal Instructor encode one hundred (100) latent fingerprint prints and one hundred (100) latent palm prints (where applicable), and search them in each database system. Conduct on-screen comparisons of all result candidates of these inquiries.

### Required Reading(s):

- 1) Lee, H. C. & Gaensslen, R. E. (Eds.) (1994). Advances in Fingerprint Technology, Chapters 2-5.
- 2) Saferstein, R. (1998). Criminalistics: An Introduction to Forensic Science, 8th (Ed.), Pages 415-417.

Estimated Training Time: 10 (ten) days

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### Module 4.3: Ethics in Forensic Science

#### Training ~~Learning~~ Objectives:

An understanding of the various ethical issues affecting forensic science.

An understanding of the ethical issues and considerations in the various aspects of forensics, including issues of personal conduct, the work environment, and the court room.

An understanding of the relationship between forensic scientists and law enforcement.

An understanding of the pressures that can lead to ethical dilemmas.

An understanding of the ethical standards, or lack of standards, that are in place for forensic scientists.

#### Method of Testing ~~Training Objectives~~:

~~Oral examination by the Principal Instructor on the training objectives. Practical exhibition of knowledge related to ethical issues and considerations in the various aspects of forensics, including issues of personal conduct, the work environment, and the court room.~~

~~Practical understanding of the relationship between forensic scientists and law enforcement.~~

~~Practical understanding of the pressures that can lead to ethical dilemmas.~~

~~Practical understanding of the ethical standards, or lack of standards, that are in place for forensic scientists.~~

#### Training Methods ~~Assignments~~:

- 1) ~~Discussion with the Principal Instructor~~ ~~Attend a lecture~~ on ethics topics as related to issues in forensic science.
- 2) Research ~~and /write/communicate~~ a paper on a minimum of five (5) true instances in which ethical issues of forensic practitioners have had negative effects on case work, court, and /or innocent persons.
- 3) Complete an ethics training course approved by the Forensic Quality Manager.
- 4) Review the ASCLD/LAB guiding principles of profession responsibility for crime laboratories and forensic scientists with the Director and/or Deputy Director and the Forensic Quality Manager.

#### Required Reading:

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- 1) International Association for Identification, Code of Ethics for Latent Print Examiners.
- 2) Read the ASCLD/LAB guiding principles of professional responsibility for crime laboratories and forensic scientists.

**Estimated Training Time: 3 (three) days**

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**Module 4.5: Moot Court**

~~Learning Objectives:~~

~~An understanding of appropriate testimony techniques for testimony by a Forensic Technician.~~

~~Training Objectives:~~

~~To demonstrate competency during courtroom testimony.~~

~~Assignments:~~

- ~~1) Respond to moot court in an official court room setting, with an audience, and other participants acting as a judge, prosecutor, and defense attorney. Provide the testimony as is appropriate for a Forensic Technician.~~

~~Required reading:~~

~~None~~

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## **Module 4.4: Final Written Examination**

### **Training Objectives:**

A comprehensive understanding of training topics as outlined in this training manual.

### **Method of Testing:**

Successful completion (minimum 85% score) of a comprehensive written examination covering the training topics contained in this training manual. The written examination shall be completed by the Trainee independently and without any reference material.

### **Training Methods:**

- 1) Independent review of training material by Trainee.
- 2) Trainee may initiate discussion of any questions with the Principal Instructor prior to beginning the final written examination.

**Required Reading:** None

**Estimated Training Time:** 2 (two) days

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## **Module 4.5: Competency Test**

### **Training Objectives:**

Demonstration of ability to accurately perform assigned casework activities of a Latent Print Unit Forensic Technician.

### **Method of Testing:**

Successful completion of a competency test in latent print database searching. The competency test must be completed by the Trainee independently. Any questions shall be directed to the Principal Instructor.

### **Training Methods:**

- 1) Observe the Principal Instructor perform all assigned Latent Print Unit Forensic Technician casework activities for a minimum of 30 cases.
- 2) Independent review of training material by Trainee.
- 3) Trainee may initiate discussion of any questions with the Principal Instructor prior to beginning the competency test.

Required Reading: None

Estimated Training Time: 3 (three) days

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### **Module 4.6: Moot Court**

#### **Training Objectives:**

Successfully complete testimony based on the competency test in a mock court setting.

Receive authorization from the Director to participate in supervised casework.

#### **Method of Testing:**

Employee Testimony Evaluation forms will be used to evaluate the testimony. The forms must be completed by:

Principal Instructor  
Unit Technical Leader  
Forensic Quality Manager and/or Crime Laboratory Deputy Director

#### **Training Methods:**

- 1) Discussion with the Principal Instructor on courtroom testimony.
- 2) Observe the courtroom testimony of the Principal Instructor or another Latent Print Unit employee.
- 3) Compile a list of questions likely to be asked of a Latent Print Unit Forensic Technician in court. Prepare answers for the questions.

Required reading: None

Estimated Training Time: 4 (four) days



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## PHASE 2

### SECTION 5

#### Module 5.1: Supervised Case Work

##### Training ~~Learning~~ Objectives:

An ability to conduct independent latent print database searching ~~at a level at which supervised casework is no longer necessary~~ in accordance with all CCBI and Latent Print Unit Policies and Procedures.

Receive a Certificate of Competency from the Director in Latent Print Database Searching.

##### Method of Testing ~~Training~~ Objectives:

Practical exhibition of the use of all applicable AFIS database systems utilized in the Latent Print Unit ~~in accordance with all CCBI and Latent Print Unit Policies and Procedures.~~

Practical exhibition of written communications required for case files and official ~~notifications reports~~ in accordance with all CCBI and Latent Print Unit Policies and Procedures.

Completion of the assigned one hundred (100) cases and recommendation by the Principal Instructor for release from Phase II training.

~~Operational performance in database searches examinations to a level at which the Trainer deems supervised casework completed.~~

##### Training Methods ~~Assignments~~:

- 1) Discussion with and demonstration by the Principal Instructor ~~Attend a lecture /demonstration~~ on structure and required materials, notes, and documents to be contained in the latent print case files and written ~~notifications reports~~.
- 2) Under the direct supervision of the Principal Instructor, perform Latent Print Unit Forensic Technician assigned casework activities for a minimum of one hundred (100) cases. ~~The student/Trainee will conduct supervised case work for a period of no less than four (4) weeks. The student will be evaluated at the conclusion of this assignment by the Trainer to determine if supervised casework is no longer necessary. All phases of supervised case work will be done under the direct supervision of the Trainer.~~

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Required Reading: None

Estimated Training Time: 15 (fifteen) days

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**Module 5.2: Demonstration of Competency (Final Exam)**

**Learning Objectives:**

~~A comprehensive understanding of training topics as outlined in this training manual.~~

**Training Objectives:**

~~Successful completion of all training materials and demonstration of competency as a Forensic Technician.~~

**Assignments:**

~~1) Final Examination~~

**Required Reading:**

~~None~~

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**Module 6.1: Internal or External Proficiency Test**

~~Learning Objectives:~~

~~An understanding of internal or external proficiency testing.~~

~~Training Objectives:~~

~~Successful completion of an internal or external proficiency test in latent print examination.~~

~~Assignments:~~

~~1) Successfully complete an internal or external proficiency test.~~

~~Required Reading:~~

~~None~~

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**Module 6.2: CCBI Certification Casework Authorization**

~~Learning Objectives:~~

~~None~~

~~Training Objectives:~~

~~None~~

~~Assignments:~~

- ~~1) Achieve CCBI Certification for Casework Authorization~~

~~Required Reading:~~

~~None~~

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## **PHASE 3**

### **SECTION 6**

#### **Module 6.1: 100 % Administrative and 100 % Technical Review**

##### **Training Objectives:**

Be able to conduct independent latent print database searching in accordance with all CCBI and Latent Print Unit Policies and Procedures.

##### **Method of Testing:**

Practical exhibition of the use of all applicable AFIS database systems utilized in the Latent Print Unit in accordance with all CCBI and Latent Print Unit Policies and Procedures.

Practical exhibition of written communications required for case files and official notifications in accordance with all CCBI and Latent Print Unit Policies and Procedures.

Completion of the assigned one hundred (100) cases without any significant discrepancies that could affect the reliability of the Forensic Technician's work.

Recommendation by the Principal Instructor for release from Phase III training.

##### **Training Methods:**

- 1) Perform Latent Print Unit Forensic Technician assigned casework activities for a minimum of one hundred (100) cases.

Required Reading: None

Estimated Training Time: 15 (fifteen) days

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FT Training Checklist

**FT Training Checklist**

This training checklist is to assure that the trainer is training and the trainee is becoming competent after assessments of each module. The appearance of the initials and date of the trainer along with those of the trainee indicates that both trainee and trainer agree that competency in the curricula of the specified module has been successfully exhibited. ~~Continuing with the next module of training cannot proceed until the trainee and trainer have shown competency in all portions of the previous module.~~

Trainee: \_\_\_\_\_ Trainer: \_\_\_\_\_

Module/Training Activity	Trainer	Date	Trainee	Date
Module 1.1: Laboratory Orientation				
Module 1.2: Operational Procedures				
Module 1.3: Crime Laboratory Safety Procedures				
Module 1.4: Evidence Management				
Module 2.1: The Anatomy of Friction Ridge Skin				
Module 2.2: Friction Ridge Pattern Recognition and Interpretation				
Module 2.3: Known Standards – Methods for Recording Friction Ridge Skin				
Module 2.4: Post-Mortem Print Collection Methods				
Module 3.1: Introduction to Latent Prints				
Module 3.2: Introduction to Latent Print Processing				
Module 3.3: Basic Powder Development Methods				
Module 4.1: Recognition and Orientation of Friction Ridge Skin				
Module 4.2: Automated Fingerprint Identification Systems (SPEX, AFIS)				
Module 4.3: Ethics in Forensic Science				
Module 4.4: Final Written Examination				
Module 4.5: Competency Test				
Module 4.6: Moot Court				
Module 5.1: Supervised Case Work				
Module 6.1: 100 % Administrative and 100 % Technical Review				

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Effective Date	Version Number	Reason
4/12/2013	1	Compliance with ASCLD/LAB Requirements
10/16/14	2	Compliance with revised LAPM22