Latent Print Section
Latent Print Examiner Program of Instruction (POI)
Comparative & Analytical Division
1. **Latent Print Examiner Program of Instruction**

1.1. **Scope**

1.1.1. This document defines the training program for Latent Print Examiners, assigned to the Latent Print Section of the Houston Forensic Science Center (HFSC).

1.1.2. Upon successful completion of this training program, the Latent Print Examiner (LPE) Trainee will be proficient in the analysis, comparison, evaluation, and verification of friction ridge impressions. In addition, they will be proficient in case documentation, including LIMS, chain of custody (COC) transfers, Mideo, AFIS entries, and report writing. The LPE will testify as an expert witness in courts of law, as required, to their findings and procedures used.

1.1.3. The full Program of Instruction (POI) for an LPE is 3080 hours. The total hours may be modified depending on the ability, skills, initiative of the Trainee, and extenuating circumstances.

1.1.4. When the training program is modified for a Trainee, the Section Manager, Technical Lead, or designee and the Quality Division must approve the modification.

1.1.5. The training program is maintained by the Section Manager, Technical Lead, or designee and may not be altered without permission.

1.2. **Responsibilities**

1.2.1. **Trainee Responsibilities**

1.2.1.1. Trainees are examiners and/or trainees employed at HFSC after meeting the requirements of education, experience, and skills and who have passed the required background check and drug screen.

1.2.1.2. The Trainee will be assigned to an authorized LPE who will act as their Primary Trainer. Authorized staff members in the Latent Print Section may also provide training in various areas if needed.

1.2.1.3. The Trainee must satisfactorily complete all practicals which are graded as satisfactory or unsatisfactory.

1.2.1.4. The Trainee will provide the instructor with weekly Training Logs.

1.2.1.5. The Trainee should accompany examiners to court to gain exposure to expert testimony on latent prints when/if possible.

1.2.1.6. Any latent print training classes available during the training phase should be attended by the Trainee when/if possible.

1.2.1.7. The Trainee will keep a notebook of their training activities during the training program. This should include time spent working, classes attended, classes instructed, court testimony observed, and special projects completed during the training phase. This information will be a valuable aid for future court testimony and quality purposes.

1.2.2. **Primary Trainer Responsibilities**

1.2.2.1. The Primary Trainer will provide Monthly Training Reports (MTR) to the Section Manager, Technical Lead, and the Trainee’s Supervisor. These reports are due within ten working days of the last day of each month.

1.2.2.2. MTR’s will be submitted in the form of a memorandum and will include the following information:
• The Trainee’s name and POI title.
• The chapters covered during the month and if the chapters were completed successfully.
• The chapters scheduled for the next month.
• The Trainee’s progress through the POI and scheduled completion date (i.e. ahead or behind schedule, account for adjustments).
• Significant Trainee accomplishments during the month.
• Other remarks the Primary Trainer deems appropriate.
• After each test or practical, the Primary Trainer will meet with the Trainee to discuss the trainee’s performance.

1.2.3. When a Trainee fails a written examination or practical exercise, the Primary Trainer will provide a memorandum to the Section Manager and Technical Lead. The memorandum will include the following information:
- The Trainee’s name and POI title.
- The test or practical examination that was failed and the reason for the failure.
- State the remedial actions implemented and the date for the re-examination.

1.2.4. In the event the Trainee fails to complete a chapter satisfactorily, the chapter will be reviewed with the Trainee and the chapter will be repeated. If the Trainee does not perform to an acceptable level on the retraining and retesting, a memorandum will be issued to the Trainee’s Supervisor and Section Manager, Technical Lead, or designee listing the deficiencies and remediation steps taken. The Supervisor, Section Manager, Technical Lead, or designee will determine the course of action based on the Primary Trainer’s recommendations.

1.2.5. If necessary, the Primary Trainer will organize a monthly meeting with the Trainee, the Trainee’s Supervisor, Technical Lead, and any other individuals involved in the training plan to update the group on the Trainee’s status.

1.3. Overview of Program of Instruction

1.3.1. This chapter listing does not preclude the Primary Trainer from adding other pertinent topics as applicable and/or related to the science of fingerprints, forensic science, and the criminal justice system. The Section Manager, Technical Lead, or designee and the Quality Division must approve additional chapters or topics prior to instruction or incorporation into the program.

1.3.2. Blocks of instruction may be segmented as necessary for optimal Trainee understanding of the subjects and concepts presented. All courses will be supplemented by required readings, group discussion, independent and directed study, practical exercises, and/or research (or any combination thereof).

1.3.3. If a Trainee has previous training and/or experience they may be able to take a comprehensive test to test out of chapters.
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Course of Instruction</th>
<th>Training Hours</th>
<th>Date/Trainer Initials</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Forensic Science</td>
<td>120</td>
<td><strong><strong><strong><strong><strong>/</strong></strong></strong></strong></strong></td>
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<tr>
<td>2</td>
<td>Evidence Handling and Safety</td>
<td>80</td>
<td><strong><strong><strong><strong><strong>/</strong></strong></strong></strong></strong></td>
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<td>3</td>
<td>History of Fingerprint Identification</td>
<td>80</td>
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<td>4</td>
<td>Biological Aspects of Friction Ridge Skin</td>
<td>120</td>
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<td>5</td>
<td>Friction Ridge Pattern Recognition</td>
<td>40</td>
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<tr>
<td>6</td>
<td>Obtaining Inked Finger, Palm, and Foot Prints</td>
<td>120</td>
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<tr>
<td>7</td>
<td>Analysis, Comparison, Evaluation, Verification</td>
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<td>8</td>
<td>Digital Imaging of Latent Prints</td>
<td>80</td>
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<td>9</td>
<td>Cognitive Factors in Comparative Analysis</td>
<td>80</td>
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<tr>
<td>10</td>
<td>Automated Fingerprint Identification Systems (AFIS)</td>
<td>80</td>
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<td>11</td>
<td>Competency Test</td>
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<td>12</td>
<td>Dependent Supervised Casework</td>
<td>1040</td>
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<tr>
<td>13</td>
<td>Court Testimony and Ethics</td>
<td>160</td>
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1.4. Chapter 1: Introduction to Forensic Science

1.4.1. Training Objectives:

1.4.1.1. Familiarization with HFSC, the Quality Division, and the Latent Print Section.
1.4.1.2. Introduction to the HFSC Quality Manual as well as section specific Standard Operating Procedures.
1.4.1.3. Understanding of quality assurance/quality control guidelines at HFSC.
1.4.1.4. Understanding of ISO 17025:2017 and accreditation as it is applied to HFSC and the Latent Print Section.
1.4.1.5. Understanding of the way evidence flows through the laboratory.
1.4.1.6. Basic understanding of the way other disciplines at HFSC analyze evidence.
1.4.1.7. Understanding of best evidence handling practices to ensure the integrity of the evidence for all disciplines.
1.4.1.8. Understanding of how Multiple Disciplinary Requests (MDRs) are handled at HFSC.
1.4.1.9. Working knowledge of latent print development techniques that may interfere with laboratory analysis by other forensic disciplines.

1.4.2. Required Readings:

<table>
<thead>
<tr>
<th>Trainee/Completion Date</th>
<th>Required Readings</th>
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<tbody>
<tr>
<td>1.4.2.1. HFSC administrative policies and procedures</td>
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<tr>
<td>1.4.2.2. Quality Manual, Houston Forensic Science Center</td>
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<td>1.4.2.3. Security Manual, Houston Forensic Science Center</td>
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<td>1.4.2.4. Standard Operating Policies, Latent Print Section</td>
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<td>1.4.2.5. ISO 17025:2017 and supplemental documents</td>
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<tr>
<td>1.4.2.6. Fingerprint Sourcebook, NIJ, Chapters 7, 8, and 12</td>
<td><em><strong><strong><strong>/</strong></strong></strong></em>_____</td>
</tr>
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<td>1.4.2.7. NIST Expert Working Group on Human factors, Latent Print Examination and Human Factors, NIJ, 2012, Chapter 5</td>
<td><em><strong><strong><strong>/</strong></strong></strong></em>_____</td>
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<tr>
<td>1.4.2.8. Forensic Comparative Science, Vanderkolk, Chapters 1, 2, 7, 8, 9</td>
<td><em><strong><strong><strong>/</strong></strong></strong></em>_____</td>
</tr>
<tr>
<td>1.4.2.9. Forensic Science: An Introduction to Scientific &amp; Investigative Techniques, Ch. 13</td>
<td><em><strong><strong><strong>/</strong></strong></strong></em>_____</td>
</tr>
<tr>
<td>1.4.2.10. Criminalistics, 12th edition, Saferstein, Chapters 1-4</td>
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</table>
1.4.2.11. NAS Report Strengthening Forensic Science, 2009 Report _______/_____________

1.4.2.12. P-CAST Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-
Comparison Methods, 2016 Report _______/_____________

1.4.3. Training Practicals: None

1.4.4. Training Standards:

1.4.4.1. Self-study for required reading _______/_____________

1.4.4.2. The Trainee must pass a written test on required reading _______/_____________

1.4.4.3. Tour of other HFSC forensic disciplines _______/_____________

1.4.4.4. Attend at least one MDR meeting _______/_____________
1.5. Chapter 2: Evidence Handling and Safety

1.5.1. Training Objectives:

1.5.1.1. Obtain the knowledge and practical skills to properly handle, mark, package, and transport physical evidence, thereby preserving its integrity and evidentiary value.

1.5.1.2. Learn about the equipment used by the Latent Print Section.

1.5.1.3. Understanding of basic health and safety issues such as potential biological hazards, personal safety hazards posed by bloodborne pathogens, procedures for handling sharps, and the use of personal protective equipment (PPE).

1.5.1.4. Understanding of the importance of proper chain of custody.

1.5.1.5. An introduction to basic health and safety issues.

1.5.1.6. Understanding of proper safety procedures when in Latent Print Processing.

1.5.2. Required Reading:

1.5.2.1. Health and Safety Manual, Houston Forensic Science Center

1.5.2.2. Fingerprint Sourcebook, NIJ, Chapter 11

1.5.2.3. Safety for the Forensic Identification Specialist, Masters Chapters 4-6, 8, 13, 14, 16-18, and 20

1.5.2.4. Handling of Evidence & Documentation Procedures, HFSC SOP

1.5.3. Training Practicals: None

1.5.4. Training Standards:

1.5.4.1. Self-study for required reading

1.5.4.2. The Trainee must pass a written test on required reading

1.5.4.3. Tour of Latent Print Processing with an understanding of safety issues

1.5.4.4. Spend one week with Latent Print Processors to obtain a basic understanding of sequential processing.
1.6. Chapter 3: History of Fingerprint Identification

1.6.1. Training Objectives

1.6.1.1. Gain knowledge on the background and history of the science of fingerprints.
1.6.1.2. Learn about historical people, events, and early methods of identification.
1.6.1.3. Learn the earliest recorded awareness of fingerprints.
1.6.1.4. Understanding of the scientific observations leading to modern fingerprint identification.
1.6.1.5. Learn the chronology of fingerprints throughout the world and in the United States.

1.6.2. Reference Reading

1.6.2.1. Fingerprint Source Book, NIJ, Chapter 1

1.6.2.2. Quantitative-Qualitative Friction Ridge Analysis, Ashbaugh, Chapters 1-2

1.6.2.3. Advances in FP Technology, 2nd Edition, Lee and Gaensslen, Chapter 1

1.6.2.4. Criminalistics, 12th edition, Saferstein, Pages 130-131

1.6.2.5. Friction Ridge Skin, Cowger - Chapter 1


1.6.3. Training Practicals:

1.6.3.1. Write a short synopsis of the contributions of each of the following figures: Hershel, Faulds, Galton, Vucetich & Henry

1.6.3.2. Create a timeline of important historical events as they pertain to friction ridge skin

1.6.4. Training Standards:

1.6.4.1. Self-study for required reading

1.6.4.2. The Trainee must pass a written test on required reading
1.7. Chapter 4: Biological Aspects of Friction Ridge Skin

1.7.1. Training Objectives:

1.7.1.1. Gain knowledge on the biology/physiology of friction ridge skin.

1.7.1.2. Understanding of the formation of friction ridges during fetal development prior to birth.

1.7.1.3. Understanding that the friction ridge skin arrangement is unique and persistent through the life of the individual, barring scars, some diseases and decomposition after death.

1.7.1.4. Understanding of the biological significance of friction skin ridge patterns, the basic anatomy, and terminology of the hands and feet.

1.7.2. Required Readings:

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<th>Trainee/Completion Date</th>
<th>Required Reading</th>
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<tbody>
<tr>
<td></td>
<td>1.7.2.1. Fingerprint Source Book, NIJ, Chapters 2 &amp; 3</td>
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<td>1.7.2.2. Criminalistics, 12th edition, Richard Saferstein, pages 131-134</td>
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<td>1.7.2.3. Quantitative-Qualitative Friction Ridge Analysis, Ashbaugh, Chapter 3</td>
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<td></td>
<td>1.7.2.4. Fingerprints and Other Ridge Skin Impressions, Champod, CRC, Chapter 1</td>
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<td></td>
<td>1.7.2.5. Scott’s Fingerprint Mechanics, Olsen, Chapter 1, Pages 5-14 and 24-30</td>
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<td></td>
<td>1.7.2.8. Defined Pattern, Overall Pattern, and Unique Pattern, Ashbaugh, D., JFI, 42(6):503-512</td>
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<td>1.7.2.9. Congenital Malformations of Human Dermatoglyphs, David, T.J., Download from adc.bmj.com, January 2009</td>
</tr>
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<td></td>
<td>1.7.2.10. Scars in Friction-Ridge Skin, Maceo, A., Evidence Technology Magazine, July-August 2005, pp. 26-28</td>
</tr>
</tbody>
</table>
1.7.3. Training Practicals:  

1.7.3.1. Find and read two articles published within the past 7 years on the biology and physiology of friction ridge skin.

   Trainer/Completion Date  

1.7.3.2. Give a presentation on these papers to the Latent Print Section

   Trainer/Completion Date

1.7.4. Training Standards:  

1.7.4.1. Self-study for required reading

   Trainer/Completion Date

1.7.4.2. The Trainee must pass a written test on required reading

   Trainer/Completion Date
1.8. Chapter 5: Friction Ridge Pattern Recognition

1.8.1. Training Objectives:

1.8.1.1. Understanding of common terminology and definitions associated with friction ridge pattern recognition.

1.8.1.2. Understanding of basic classification systems (Henry, NCIC).

1.8.1.3. Basic understanding of friction ridge formations as they relate to recognition, orientation, interpretation and identification.

1.8.2. Required Readings:

1.8.2.1. The Self-Made Tapestry: Pattern Formation in Nature, Ball, Chapter 1

1.8.2.2. Fingerprint Source Book, NIJ, Chapter 5

1.8.2.3. The Science of Fingerprints, FBI, Chapters 2-8

1.8.2.4. Friction Ridge Skin, Cowger, Chapter 3

1.8.2.5. Scott’s Fingerprint Mechanics, Olsen, Chapter 1, pp 15-23


1.8.2.8. Hand Determination of Whorl Patterns Using Axis Slant, Brazelle, JFI 68(1)

1.8.3. Training Practicals:

1.8.3.1. Classify five fingerprint cards including ridge counts and reference patterns.

1.8.4. Training Standards:

1.8.4.1. Self-study for required reading

1.8.4.2. The Trainee must pass a written test on required reading
1.9. Chapter 6: Obtaining Inked Finger, Palm, and Foot Prints

1.9.1. Training Objectives:

1.9.1.1. Understanding of the materials, procedures, methods, and techniques for recording finger, palm and sole prints.

1.9.1.2. Demonstrate an acceptable proficiency level in recording friction ridge skin and the importance of recording all friction ridge detail (major case prints).

1.9.1.3. Understanding the various methods for recording known friction ridges for criminal history or personal identification; including ink, inkless systems, Handiprint, and electronic capture systems.

1.9.1.4. Understanding the proper method of completing fingerprint and palm print card information, sequence for recording fingers, and method and purpose of printing plain impressions.

1.9.1.5. Understanding of procedures and equipment used in fingerprinting deceased persons.

1.9.2. Reference Readings:

1.9.2.1. The Fingerprint Source Book, NIJ, Chapter 4

1.9.2.2. The Science of Fingerprints, FBI, Chapters 9-11, and 19

1.9.2.3. Scott’s Fingerprint Mechanics, Olsen, Chapter 2

1.9.2.4. Friction Ridge Skin, Cowger, Chapter 2

1.9.2.5. Wertheim, P. Inked Major Case Prints, JFI, 1999, 49(5):468-177


1.9.2.7. “Artifacts Caused by Livescan Affect a latent Print Comparison: An Action Case”, JFI, Vol. 69, No. 1, 2019

1.9.3. Training Practicals

1.9.3.1. Take a complete set of fingerprints from five different subjects.

1.9.3.2. Take a complete set of palm prints from five different subjects.

1.9.3.3. Take a complete set of foot prints from two different subjects.
1.9.3.4. Take a complete set of major case prints from two different subjects using ink.

1.9.3.5. Take a set of major case prints from two different subjects using HandiPrint.

1.9.4. Training Standards

1.9.4.1. Self-study for required reading.

1.9.4.2. The Trainee must pass a written test on required reading
1.10. Chapter 7: Analysis, Comparison, Evaluation, Verification (ACE-V)

1.10.1. Training Objectives:
   1.10.1.1. Understanding of the ACE-V methodology and its application to friction ridge examination and the ability to analyze partial friction ridge impressions to determine their value.
   1.10.1.2. Understanding of the use/criteria of NAQ, AQ, NV, NRD, PSL, and VEO for analysis determinations.
   1.10.1.3. Understanding of friction ridge characteristics, terminology, and the varying definitions/interpretations assigned to combinations of ridge characteristics and their use in comparisons.
   1.10.1.4. Understanding of the relationship between quality and quantity throughout the ACE-V process.
   1.10.1.5. Understanding the value of incipient ridge characteristics in an impression.
   1.10.1.6. Ability to recognize and utilize ridge flow configurations, scars, creases, and other friction ridge characteristics to support latent print examination.
   1.10.1.7. Ability to recognize/determine anatomical source and orientation from which a latent print originated.
   1.10.1.8. Understanding of the effects of distortion and how to properly analyze distortion.
   1.10.1.9. Understanding the nature of tonal reversals and the ability to properly analyze these occurrences when they are encountered in latent print impressions.
   1.10.1.10. Ability to recognize simultaneous impressions and understanding their value for comparison.
   1.10.1.11. Understanding of the history of a point standard internationally and nationally and why there is currently no minimum “number” of points needed for an identification.
   1.10.1.12. Demonstrate the ability to properly conduct a comparison.
   1.10.1.13. Understanding of the criteria needed for an identification, exclusion, or inconclusive determination.
   1.10.1.15. Basic awareness of research into statistical models and the potential for their integration into current friction ridge comparison procedures in the future.
1.10.16. Understanding of the importance of verification.

1.10.2. Required Readings:

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1.10.2.1. Quantitative-Qualitative Friction Ridge Analysis, Ashbaugh, Chapters 4-8  

|       /          |
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1.10.2.2. Fingerprint Source Book, NIJ, Chapters 9, 10, and 14  

|       /          |
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1.10.2.3. Friction Ridge Skin, Cowger, pages 129-206  

|       /          |
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1.10.2.4. Advances in FP Technology, 2nd Edition, Lee and Gaensslen, Chapter 2  

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1.10.2.5. Advances in FP Technology, 3rd Edition, Lee and Gaensslen, Chapter 15  

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|_________|

1.10.2.6. Fingerprints and Other Ridge Skin Impressions, C. Champod, Chapter 2  

|       /          |
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1.10.2.7. NIST Expert Working Group on Human factors, Latent Print Examination and Human Factors, NIJ, 2012 - Chapters 1-4  

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1.10.2.23. “Documenting and Reporting Inconclusive Results”, Maceo, A., JFI, 201, 61(3):226-231

1.10.2.24. “Blind Verification: Does it Compromise the Confidence of ACE-V Methodology to the Scientific Method”, Mankevich, A., Chesapeake Examiner, Fall 2007, 45(2):22-29

1.10.2.25. Analysis, Comparison, Evaluation, and Verification Methodology, HFSC SOP

1.10.3. Training Practicals:

1.10.3.1. Analyze 100 latent prints to determine value

1.10.3.2. Analyze 100 latent prints and mark the following

1.10.3.2.1. Determine anatomical origin
1.10.3.2.2. Mark orientation per SOP
1.10.3.2.3. Demonstrate knowledge of ridge flow and/or pattern type
1.10.3.2.4. Demonstrate knowledge of second level detail
1.10.3.2.5. Demonstrate knowledge of third level detail
1.10.3.2.6. Demonstrate knowledge of “Red Flag” areas (ie. distortion, pressure, tonal reversal, etc.)
1.10.3.2.7. Demonstrate ability to trace ridges accurately

1.10.3.3. Complete comparison exercises of varying difficulty until Trainee is deemed competent

1.10.4. Training Standards:
1.10.4.1. Self-study for required reading
1.10.4.2. The Trainee must pass a written test on required reading
1.11. Chapter 8: Digital Imaging of Latent Prints

1.11.1. Understanding of digital enhancement techniques using Adobe Photoshop or other similar programs to improve the quality of latent print images.

1.11.1.1. Tonal reversal
1.11.1.2. Position reversal
1.11.1.3. Use of layers
1.11.1.4. Image contrast
1.11.1.5. Image calibration/resolution
1.11.1.6. Use of digital filters

1.11.2. Required Readings:

1.11.2.1. Criminalistics, 12th edition, Saferstein, pages 146-148
   _______/_____________

   _______/_____________

   _______/_____________

   _______/_____________

1.11.2.5. “Standard for Friction Ridge Digital Imaging”, swgfast.org
   _______/_____________

1.11.3. Training Practicals:

1.11.3.1. Trainer-led instruction to Adobe Photoshop:
   _______/_____________
   _____Image 1:1 calibration/Resolution
   _____Digital imaging/processing of latent prints
   _____Quality/contrast enhancement
   _____Black/White; use of grayscale
   _____Tonal Reversal/Spatial Reversal
   _____Use of Layers
   _____Annotation/Documentation of Images

1.11.3.2. The Trainee will independently capture, calibrate, enhance, and document latent prints (to be determined by the Primary Trainer)
   _______/_____________
1.11.4. Training Standards:

1.11.4.1. Self-study for required readings.  
______/__________

1.11.4.2. The Trainee must pass a written examination on the required readings.  
______/__________
1.12. Chapter 9: Cognitive Factors in Comparative Analysis

1.12.1. Training Objectives:

1.12.1.1. Understanding how outside factors or extraneous information can influence decision making during friction ridge examinations.

1.12.1.2. Develop an awareness of various factors, physical and psychological, that can influence the decision-making process when making comparisons.

1.12.1.3. Understanding bias and how it can affect the interpretation of friction ridge skin features and the resulting conclusions:
   1.12.1.3.1. Confirmation bias
   1.12.1.3.2. Contextual bias

1.12.2. Required Readings:


1.12.2.2. Fingerprint Source Book, NIJ, Chapter 15


1.12.2.6. A Perspective on Errors, Bias, and Interpretation in the Forensic Sciences and Direction for Continuing Advancement*, JFS, July 2009, Vol. 54, No. 4, Qualtrax, TFSC Reading

1.12.2.7. Cognitive and Human Factors in Expert Decision Making: Six Fallacies and the Eight Sources of Bias, Dror, Analytical Chemistry 2020, pp. 7998

1.12.2.8. Practical Solutions to Cognitive and Human Factor Challenges in Forensic Science, Dror, Forensic Science Policy & Management, 2013, Qualtrax, TFSC Reading

1.12.3. Training Practicals:
1.12.3.1. Find and read two articles published within the past 5 years on human factors influencing the decision-making process during latent print comparisons.

_____/_____________

1.12.3.2. Trainee will give a presentation of these papers to the Latent Print Section.

_____/_____________

1.12.4. Training Standards:

1.12.4.1. Self-study for required reading

_____/_____________

1.12.4.2. The Trainee must pass a written test on required reading

_____/_____________

1.13.1. Training Objectives

1.13.1.1. Understanding of the history, capabilities and limitations of AFIS and the types of searches.

1.13.1.2. Understanding of how all local, state, and federal AFIS systems function.

1.13.1.3. Learn the HFSC Latent Print Section AFIS workflows.

1.13.1.4. Understanding of why a latent search in AFIS may be negative.

1.13.1.5. Understanding of close non-matches and AFIS interoperability.

1.13.2. Reference Reading

1.13.2.1. The Fingerprint Source Book, NIJ - Chapter 6

1.13.2.2. Advances in Fingerprint Technology, Lee and Gaensslen, 2nd Edition, Chapter 8


1.13.2.5. Automated Fingerprint Identification System (AFIS) Operations, HFSC SOP

1.13.2.6. Glossary and Abbreviations, HFSC SOP

1.13.2.7. Fundamentals of Fingerprint Analysis, Chapter 7

1.13.3. Training Practicals:

1.13.3.1. Observe searches conducted by Latent Print Examiners in all systems.

1.13.4. Training Standards:

1.13.4.1. Self-study for recommended reading.

1.13.4.2. The Trainee must pass a written test on required reading
1.14. Chapter 11: Competency Test

1.14.1. The Trainee must successfully complete all designated modules in the training manual as well as the competency test before acquiring authorization to perform dependent supervised casework.

1.14.2. Competency Test will include:

1.14.2.1. Practical that will consist of mock evidence. The trainee will be expected to perform the ACE process on any latents determined to be suitable and to obtain the expected conclusions.

1.14.2.2. The trainee has passed all modules through a comprehensive assessment and/or written examinations. This is used to fulfill the final written exam as required by the quality manual.

1.14.2.3. The Trainee will give a presentation on a topic of their choosing to the Latent Print Section.

Trainer/Completion Date

\[
\begin{array}{ll}
\text{Trainer/Completion Date} & \\
\text{1.14.2.1. Practical} & \text{_____}/\text{__________} \\
\text{1.14.2.2. Assessment and/or Written Exams} & \text{_____}/\text{__________} \\
\text{1.14.2.3. Presentation} & \text{_____}/\text{__________}
\end{array}
\]
1.15. Chapter 12: Dependent Supervised Casework

1.15.1. During dependent supervised casework, the Trainee works cases from start to finish with supervision. At each stage of dependent supervised casework, the Trainee’s work will be reviewed by the Primary Trainer to ensure all applicable policies and workflows are being followed and adequate documentation is recorded. Cases worked under dependent supervised casework will be assigned to the Primary Trainer in LIMS. The Primary Trainer will regularly update the Latent Print Supervisor and Latent Print Manager, Technical Lead, or designee with either a recommendation to be signed off on dependent supervised casework, or if further training is required.

1.15.2. The Trainee will keep a spreadsheet of cases processed to include case numbers, results, and any other notes deemed necessary.

1.15.3. Training Standards: 

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1.15.3.1.1. The trainer will select five final cases to be worked by the trainee under supervised casework. These cases will be worked without asking the primary trainer questions if possible. There should be few to no corrections made. All work will be performed by the trainee including the writing of the report and checked by the trainer before issuance. These cases will be used to gauge the competency of the trainee to write test reports as required by the Quality Manual. However, it should be noted that these cases will bear the signature of the trainer.
1.16. **Chapter 13: Court Testimony and Ethics**

1.16.1. Training Objectives:

1.16.1.1. Understanding of the role of expert witness testimony.

1.16.1.2. Knowledge of factors regarding the admissibility of evidence.

1.16.1.3. Understanding of courtroom operational procedures.

1.16.1.4. Knowledge of major court decisions and their significance.

1.16.1.5. Understanding of professional ethics.

1.16.2. Required Readings:

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1.16.2.1. Fingerprint Sourcebook, NIJ, Chapters 12-15

1.16.2.2. Advances in FP Technology, 2nd Edition, Lee and Gaenslen, Chapter 10

1.16.2.3. Friction Ridge Skin, Cowger, Chapter 9

1.16.2.4. NIST Expert Working Group on Human factors, Latent Print Examination and Human Factors, NIJ, 2012, Chapter 6

1.16.2.5. Effective Expert Witnessing, Chapters 2-6 and 10 (pages 149-155)

1.16.2.6. Ethics in Forensic Science, Chapters 3, 4, 10, 12, and 13

1.16.2.7. NAS Report Strengthening Forensic Science, 2009 Report (as pertaining to latent prints)

1.16.2.8. P-CAST Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods, 2016 Report (as pertaining to latent prints)

1.16.2.9. Landmark Decisions Involving Evidence of Friction Skin Impression, Andre Moenssens, Finger Print and Identification Magazine, December 1966


1.16.2.11. Confirmation Bias, Ethics, and Mistakes in Forensics, Jon Byrd, Journal of Forensic Identification, 511\523 56 (4), 2006
1.16.2.12. Defending Against the Critics Curse, Glenn Langenburg, The Chesapeake Examiner, Spring 2003 Vol. 41 No. 1


1.16.2.18. Buffey rape case sets precedent: Prosecutors must disclose evidence, 11/10/15, Gazette Mail, Qualtrax TFSC Reading Material

1.16.2.19. Judge reverses murder conviction, saying crucial DNA information not disclosed, 10/24/17, San Diego Union Tribune, Qualtrax TFSC Reading Material

1.16.3. Training Practicals:

1.16.3.1. Prepare Statement of Qualifications (SOQ) and Curriculum Vitae (CV)


1.16.3.3. Write a short synopsis of recent court developments as they relate to fingerprints.

1.16.3.4. Prepare list of court qualifying questions
1.16.3.5. When possible attend/observe testimony of other analysts _______/_____________

1.16.4. Training Standards: 

1.16.4.1. Prepare for and successfully participate in a moot court _______/_____________

1.16.4.2. A testimony evaluation form has been completed by at least the primary trainer and may include participants in the moot court such as the individuals serving as the prosecution, the defense, and the judge _______/_____________

1.16.4.3. Self-study for required readings. _______/_____________

1.16.4.4. The Trainee must pass a written test on required reading. _______/_____________