

**Purpose:** Standard for Minimum Training Requirements for Forensic Document Examiners

This SOP lists the minimum requirements and procedures that should be used for the fundamental training of a forensic document examiner. The procedures outlined here are grounded in the generally accepted body of knowledge and experience in the field of forensic document examination. By following these requirements and procedures, an appropriate trainee can acquire the scientific, technical, and other specialized knowledge, skill, and experience required to reliably perform the work of a forensic document examiner.

**Responsibility:** Forensic Examiners assigned to the Questioned Documents Unit or performing casework in the Unit

**Terminology:**

*technical visit, n*—travel for the purpose of obtaining information, knowledge, or training, including interaction with or demonstration by pertinent manufacturers, businesses, and laboratories.

**Training Materials and Equipment:**

1. The trainee should have access to textbooks, periodicals, papers, and other professional literature.
2. The trainee should have access to equipment appropriate to each area of instruction.

**Suggested Requirements for the Trainee:**

1. Successfully passed the minimum requirements for Forensic Science Examiner 1 or Connecticut Career Trainee.

**Suggested Requirements for the Trainer(s):**

1. The principal trainer shall be a forensic document examiner that has been deemed competent in the discipline by the Director or his designee.
2. Have been trained in the topics of instruction as suggested by SWGDOC or other comparable organization.
3. The qualifications of any trainers shall be approved by the Section Lead or the Deputy Director.

**Overall Training Program:**

1. As a guideline, the training program may take up to 24 months to complete; limited types of analysis may be approved following successful completion of various sections. Training may be completed sooner than 24 months depending on previous training and experience. Refer to training GL-14.
2. Completion of training will depend on the trainee's level of experience and the trainee may be authorized to perform casework in certain areas while continuing training in others.
3. Each area of instruction will have an objective(s) established by the principal trainer. Examination(s) (for example, written test, oral test, practical exercise) will be administered in order to measure the trainee's knowledge and competency in the area.

*Approved by Director: Dr. Guy Vallaro*

NOTE —Although attending meetings and presentations or webinars is useful as supplemental training, it does not replace the training outlined in this SOP. However, the principal trainer may grant credit to the trainee for knowledge acquired at such meetings and presentations.

4. Prior experience may be used to successfully complete areas of this training program. If the prior experience is technical in the area of questioned documents, the candidates prior experience will be assessed by the principal trainer and Deputy Director. This assessment may be conducted through interview and a competency test.
5. A training record for each trainee will be maintained and will document the following:
  - 1) Instruction in each topic area.
  - 2) A bibliography of relevant literature read.
  - 3) Examination(s) (for example, written test, oral test, practical exercise).
  - 4) Case statistics (for example, number, type, items, reports).
  - 5) Outside training, webinars, technical visits, courses, conferences, or workshops attended.
  - 6) Research conducted, if applicable
  - 7) Retraining (if necessary) will be performed under the supervision of the Quality Manager.

## **6. Training Topics**

A formal written training program will include specific topics of instruction. The order in which they are administered is discretionary; however, the amount of time must be adequate to ensure competency in all topic areas. The minimum specific topics to be covered are:

1. Introduction and History of Forensic Document Examination:
  - 1) Ethical responsibilities and ASCLD Guiding Principles (GL 1.4 and GL 5)
  - 2) Literature of the field
  - 3) Evolution of the field
  - 4) Historical cases
  - 5) Scientific method
  - 6) Research methodology
  - 7) Laboratory General Training, Proficiency testing and Professional Development (GLs 14, 15 and 16)
2. Evidence Handling Procedures:
  - 1) Introduction to the Laboratory (GLs 1)
  - 2) Safety and Security Procedures (GL 2 and GL 3)
  - 3) Introduction to LIMS system (GL 4)

*Approved by Director: Dr. Guy Vallaro*

- 4) Evidence Handling procedures (GL 12 and 13)
  - 4) Laboratory Procedures and protocols (GL 6, 7, 8, 9, 10, 11, 17, 18, 19 and 20)
  - 5) Relationship of forensic document examination to other forensic disciplines.
  - 6) Collection and preservation of Questioned Document evidence
  - 7) Marking and documentation
  - 8) Chain of custody.
3. Examination Procedures:
- 1) Procedures and protocols
  - 2) Theory of individualization
  - 3) Case organization
  - 4) Note taking
  - 5) Conclusions and findings
  - 6) Report writing
4. Laboratory Instrumentation and Equipment:
- 1) Procedures and protocols
  - 2) Physics of light pertinent to forensic document examination procedures
  - 3) Microscopy
  - 4) Measuring systems and devices
  - 5) Light sources
  - 6) Electrostatic detection devices
  - 7) Typewriter examination devices
  - 8) Computers and peripherals
  - 9) Software
  - 10) Other relevant laboratory equipment
5. Paper:
- 1) Procedures and protocols
  - 2) History of paper
  - 3) Manufacturing processes
  - 4) Physical properties (for example, light-reactive, watermarks, dimensions, security features)
  - 5) Physical matches (for example, fibers, tears, edge striations)
  - 6) Tapes and adhesives
  - 7) Indentations
6. Writing Instruments and Inks:
- 1) Procedures and protocols
  - 2) History of writing instruments and inks

*Approved by Director: Dr. Guy Vallaro*

- 3) Properties of inks
  - 4) Destructive and nondestructive analyses of inks
  - 5) Writing instrument characteristics
  - 6) Sequence, direction, and pressure of strokes
- 
7. Handwriting (including Cursive or Script Style Writing, Hand Printing, Signatures, Numerals, and Other Written Marks or Signs):
    - 1) Procedures and protocols
    - 2) History and theory
    - 3) Physiology of handwriting and motor control
    - 4) Handwriting systems
    - 5) Handwriting comparison process
    - 6) Handwriting characteristics (individual and class)
    - 7) Features of handwriting (for example, variation, line quality, skill level)
    - 8) Distorted handwriting
    - 9) Factors affecting handwriting (internal and external)
    - 10) Tracings and simulations
    - 11) Other handwriting problems
- 
8. Alterations, Obliterations, and Erasures:
    - 1) Procedures and Protocols
    - 2) Types of alterations (for example, page substitution, insertion)
    - 3) Types of obliterations (for example, opaquing fluid, over-writing, chemical)
    - 4) Types of erasures (physical and chemical)
    - 5) Detection and decipherment techniques
- 
9. Typewriters:
    - 1) Procedures and protocols
    - 2) History of typewriters
    - 3) Fundamentals of typewriter examination (individualization and comparison)
    - 4) Typestyle classification
    - 5) Typing and correction ribbon examinations
    - 6) Paper fiber transfer
- 
10. Computer Printers:
    - 1) Procedures and protocols
    - 2) History of computer printers
    - 3) Fundamentals of computer printer examinations (individualization and comparison)
    - 4) Computer printing processes (impact and nonimpact)

*Approved by Director: Dr. Guy Vallaro*

5) Font classification

11. Photocopiers:

- 1) Procedures and protocols
- 2) History of photocopiers
- 3) Electrostatic and other imaging processes
- 4) Fundamentals of examination (individualization and comparison)
- 5) Alteration and manipulation techniques

12. Facsimiles:

- 1) Procedures and protocols
- 2) History of facsimile machines
- 3) Imaging processes
- 4) Fundamentals of examination (individualization and comparison)
- 5) Alteration and manipulation techniques

13. Printing Processes:

- 1) Procedures and protocols
- 2) History of printing
- 3) Typography
- 4) Characteristics of printing processes
- 5) Fundamentals of examination (individualization and comparison)
- 6) Security features

12. Mechanical Impressions:

- 1) Procedures and protocols
- 2) History of devices (for example, check writers, rubber and polymer stamps, paper binders, staples, embossing devices, seals and stamped impressions, fasteners, hole punchers)
- 3) Fundamentals of examination (individualization and comparison)

13. Charred and Soaked Documents:

- 1) Procedures and protocols
- 2) Care and preservation
- 3) Examination and decipherment

14. Photography and Digital Imaging:

- 1) Procedures and protocols
- 2) General photography
- 3) Document photography
- 4) Digital photography

*Approved by Director: Dr. Guy Vallaro*

- 5) Digital imaging techniques
- 6) Alteration and manipulation techniques
- 7) Image editing software

15. Miscellaneous Examinations:

- 1) Dependent upon the capabilities or requirements of the laboratory

16. Expert Witness and Legal Proceedings:

- 1) Procedures and protocols
- 2) Terminology
- 3) Relevant law
- 4) Adjudication systems
- 5) Effective communication
- 6) Courtroom demeanor
- 7) Preparation and use of demonstrative exhibits
- 8) Observation of pre-trial conferences and testimony of experts, actual or mock
- 9) Participation as an expert witness in mock trials
- 10) Understanding of critical challenges to the discipline

17. Practical Experience:

- 1) Supervised casework
- 2) Training or observation at other forensic document laboratories is recommended
- 3) Supplemental education (for example, courses, seminars, technical visits, workshops)

**Required Text Reading:**

To develop a contextual understanding, each of the following texts will be read from cover to cover – in the following order. This training will be recorded in the training log. Some assignments that require a written paper will have a specific reading to complete.

Questioned Documents by Albert S. Osborn

The Problem of Proof by Albert S. Osborn

The Mind of the Jury by Albert S. Osborn

Questioned Document Problems by Albert S. Osborn

Suspect Documents by Wilson R. Harrison

Forgery Detection by Wilson R. Harrison

Scientific Examination of Questioned Documents by Ordway Hilton

Typewriting Identification - ID System for Questioned Typewriting by Billy Prior Bates

Forensic Examination of Rubber Stamps by Jan Seaman Kelly

A Selection of International Penmanship Systems by William & Katherine Koppenhaven

*Approved by Director: Dr. Guy Vallaro*

Evaluating Evidence by Katherine Mainolfi Koppenhaven

Forensic Signature Examination by Steven A. Slyter

Detecting Forgery - Forensic Investigation of Documents by Joe Nickell

Fundamentals of Criminal Investigation by Charles E. O'Hara & Gregory I. O'Hara

Forensic Science - An Introduction To Criminalistics by P. DeForest, R. Gaensslen & H. Lee

Document Examiner Textbook by Jess E. Dines

Scientific Examination of Documents: Methods and Techniques by David Ellen

Handwriting Identification: Facts and Fundamentals by A. M. Headrick & Roy Huber

Ames on Forgery by D. T. Ames

The following research topics may have a paper and presentation:

- 1 Forensic Science General
- 2 The Questioned Document Examiner
- 3 Laboratory Equipment
- 4 Theory of Identification
- 5 Printing Processes
- 6 Writing Instruments and Inks
- 7 Paper
- 8 Handwriting History/General
- 9 Handwriting – Characteristics
- 10 Handwriting – Variation
- 11 Handwriting – Signatures
- 12 Handwriting – Specimens
- 13 Handwriting – Comparisons
- 14 Hand printing and Numerals
- 15 Typewriting – History/General
- 16 Typewriting – Examinations
- 17 Other Mechanical Impressions
- 18 Office Copiers
- 19 Miscellaneous Document Problems
- 20 Historical Cases and Legal Precedence

**Authorization for Case Work:**

At the end of the training program, a memo/email shall be written to the Deputy Director stating that the analyst has successfully completed their training and has been administered a competency case that evaluated their analytical skills and their ability to clearly communicate their findings in a report.

The Deputy Director may review the training files or simply endorse this memo/email and generate a request to the Quality Section requesting that this analyst be authorized to perform casework in that discipline.

*Approved by Director: Dr. Guy Vallaro***Authorization for Technical Reviews:**

The analyst will perform casework and after gaining experience in conducting analysis and reporting findings in a variety of evidence type/conclusions in the discipline, their experience will be evaluated for the ability to conduct technical reviews. This evaluation period may include technical review ghosting with an experienced examiner. Once the analyst has completed the evaluation period, a memo/email shall be written to the Deputy Director stating that the analyst has successfully completed their evaluation period and has been deemed competent to conduct technical reviews in that discipline.

The Deputy Director, after review, may endorse this memo/email and generate a request to the Quality Section requesting that this analyst be authorized to perform technical reviews based upon the analyst's casework experience in that discipline.

**Retraining:**

In the event that the examiner requires retraining in a specific area, the examiner will be retrained and then administered a competency test in that area prior to resuming casework in that specific area. (GL14)

**Sources of Error:** Not applicable

**References:**

SWGDOC Standard for Minimum Training Requirements for Forensic Document Examiners ver. 2013-1