

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

**FACIAL RECOGNITION EXAMINER TRAINING  
MANUAL**



Raleigh/Wake City-County Bureau of Identification  
Facial Recognition Examiner Training Manual

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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 Training Checklist as well as attest that the required reading has been accomplished. The Principal Instructor will maintain a training file containing all training materials.

Modified training programs must be approved in writing by the Quality Manager in prior to the commencement of training.

Upon completion of all technical training modules and achievement of CCBI Certification for Casework Authorization, all case work completed by that examiner will be technically reviewed for a period of at least three (3) months.

~~The above curriculum and the following modules are an outline of the minimum requirements of the Facial Recognition Examiner 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 FR Examiner 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.~~

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~~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.~~

## Chapter 1

### Module 1.1: Digital Crime Scene, Adobe Photoshop, and FACE Plus Facial Recognition Application

#### Training Learning Objectives:

A comprehension of the workflow of a Facial Recognition request from submission to completion of the Facial Recognition Review.

An understanding of the operation of the Dataworks Plus Digital Crime Scene System (DCS) and its application to Facial Recognition requests.

An understanding of the operation of Adobe Photoshop (PS) and its application to Facial Recognition requests.

An understanding of the operation of the FACE Plus Facial Recognition Application.

#### Method of Testing:

Operational exhibition of Digital Crime Scene system, Adobe Photoshop, and FACE Plus Facial Recognition application as related to Facial Recognition requests.

#### Assignments:

Operational exhibition of Digital Crime Scene system, Adobe Photoshop, and FACE Plus Facial Recognition application as related to Facial Recognition requests.

#### Training Methods

- 1) Oral discussion/demonstration with the Principal Instructor covering the appropriate use of Digital Crime Scene, encompassing case and call creation, image importation, image exportation, data field usage, and any other applicable portions of that system.

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- 2) Oral discussion/demonstration with the Principal Instructor on the use of Adobe Photoshop for its enhancement tools, including, but not limited to cropping, rotating, and exposure adjustment.
- 3) Oral discussion/demonstration with the Principal Instructor on the use of FACE Plus Facial Recognition application.
- 4) Using five facial recognition images, perform the following enhancements as required by each individual image starting with the images in Digital Crime Scene and exporting those images into Adobe Photoshop:
  - a. Cropping the image to the face alone
  - b. Rotating the image so that the face is straight
  - c. Adjust the contrast of the image
  - d. Adjust the exposure of the image
- 5) Once the above mentioned images are completed in Adobe Photoshop, export the enhanced images back into Digital Crime Scene to preserve the History Log from Adobe Photoshop.
- 6) Export the images to the computer as jpegs for submission into FACE Plus.
- 7) Print the Call Narrative Report from Digital Crime Scene to include with the Notes for a Facial Recognition request.
- 8) Import at least one (1) image into FACE Plus and send that image for searching in the database.
- 9) Demonstrate an understanding of the tools available in FACE Plus including 3D Pose Correction.
- 10) Conduct on-screen reviews of the candidate list resulting from the Facial Recognition search mentioned above.

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Required Reading(s):

- 1) Dataworks Plus FACE Plus Case Management User Guide
- 2) FISWG Approved Standards, Guidelines, and Recommendations – FR System Methods and Techniques  
(<https://www.fiswg.org/document/viewDocuments;jsessionid=2303B0B4708EB00FF4F47E8380FC9AF5>)
- 3) Chapter One, *Criminalistics: an Introduction to Forensic Science* by Richard Saferstein
- 4) CCBI Facial Recognition Examiner Training Manual
- 5) CCBI Standard Operating Procedures

Training Objectives:

~~Operational exhibition of Digital Crime Scene system as related to Facial Recognition requests.~~

~~Assignments:~~

- ~~11) Attend a lecture/demonstration on the use of DCS.~~
- ~~12) Demonstrate the workflow from receiving a FR request to completing the FR search, using DCS, PS, and the FR application.~~
- ~~13) Print the Call Narrative Report to include with the Notes for a FR request.~~

~~Operational exhibition of Adobe Photoshop as related to Facial Recognition requests.~~

~~Assignments:~~

- ~~2) Using five facial recognition images, perform the following enhancements as required by each individual image:
  - ~~a. Cropping the image to the face alone~~
  - ~~b. Rotating the image so that the face is straight~~
  - ~~c. Adjust the contrast of the image~~
  - ~~d. Adjust the exposure of the image~~~~

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~~3) Export the enhanced images back into DCS to preserve the History Log from PS.~~

~~4) Save the images to the computer for submission into FACE Plus.~~

~~Operational exhibition of FACE Plus as related to Facial Recognition requests.~~

~~Assignments:~~

~~1) Attend a lecture/demonstration on the use of FACE Plus~~

~~2) Conduct on-screen reviews of the candidate list resulting from a FR search.~~

~~3) Demonstrate an understanding of the tools available in FACE Plus including 3D Pose Correction.~~

~~Required Reading(s):~~

~~6) Dataworks Plus FACE Plus Case Management User Guide~~

~~7) FISWG Approved Standards, Guidelines, and Recommendations – FR System Methods and Techniques~~

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## Module 1.2: The Anatomy of the Face and Facial Morphological Comparison

### Training Learning Objectives:

An understanding of basic anatomy and terminology of the face.

An understanding of the basic anatomy and terminology of specific features of the face, including the ears, the eyes, the nose, and the mouth.

An understanding of the development and permanent nature of scars and the temporary nature of superficial skin blemishes.

An understanding of the contributing factors related to the ability to recognize and interpret individualizing factors in comparing facial recognition candidates to the probe image, and to render identification decisions based upon final evaluation.

### Method of Testing Training Objectives:

Practical interpretation of anatomical terms related to the face and to specific features of the face.

### Training Methods Assignments:

- 1) Attend the FBI/CJIS Face Comparison and Identification Training course.

### Required Reading:

- 1) FISWG Approved Standards, Guidelines, and Recommendations – Guidelines for Facial Comparison Methods  
(<https://www.fiswg.org/document/viewDocuments;jsessionid=2303B0B4708EB00FF4F47E8380FC9AF5>)
- 2) FISWG Approved Standards, Guidelines, and Recommendations – Facial Image Comparison Feature List for Morphological Analysis, version 1.0  
(<https://www.fiswg.org/document/viewDocuments;jsessionid=2303B0B4708EB00FF4F47E8380FC9AF5>)

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6/4/15	1	Initial implementation and creation

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## Chapter 2

### Module 2.1: Preparation for Court and Legal Issues

#### Training Learning Objectives:

An understanding of court exhibit preparations.

#### Methods of Testing Training Objectives:

Practical exhibition of preparing case file and displays for courtroom presentation.

#### Training Methods Assignments:

- 1) **Oral discussion/demonstration with Principal Instructor concerning the creation of**  
~~Attend a lecture/demonstration on making~~ enlargements **and displays** for courtroom presentation.
- 2) Prepare a court exhibit demonstrating matching characteristics in the probe image and the known image.
- 3) Create a set of at least six (6) qualifying questions and answers for expert facial recognition testimony.

**Required Reading: None**

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## Module 2.2: Ethics in Forensic Science

### Training Learning Objectives:

An understanding of the various ethical issues affecting forensic science.

### Methods of Training 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) **Oral discussion with the Principal Instructor** Attend a lecture on ethics topics as related to issues in forensic science.
- 2) **Complete an ethics training course approved by the Forensic Quality Manager.**

### Required Reading:

- 1) Read the ASCLD/LAB guiding principles of professional responsibility for crime laboratories and forensic scientists.
- 2) FISWG Approved Documents – Facial Identification Practitioner Code of Ethics (<https://www.fiswg.org/document/viewDocuments;jsessionid=2303B0B4708EB00FF4F47E8380FC9AF5>)

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6/4/15	1	Initial implementation and creation

## Chapter 3

### Module 3.1: ~~Practical~~ Facial Recognition **Final Written Examination and Demonstration of Competency (Final Exam)**

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

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

#### **Method of Testing Training Objectives:**

~~Successful completion of all training materials and demonstration of competency as a Facial Recognition Examiner.~~

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

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

- 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.
- 3) **Complete the Final Written Examination.** ~~Final Examination~~

Required Reading: None

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**Module 3.2: Facial Recognition Competency Test ~~Meet Court~~**

**Training Objectives:**

Demonstration of ability to accurately perform assigned casework activities of a Facial Recognition Examiner.

**Method of Testing:**

Successful completion of a competency test in facial recognition analysis, comparison, and evaluation. The competency test must be completed by the Trainee independently. Any questions shall be directed to the Principal Instructor.

Successful completion of an oral examination to assess the individual's knowledge of the discipline. The oral examination will be conducted by, at a minimum, the Principal Instructor, the Unit Technical Leader and the Forensic Quality Manager, and/or the Deputy Director.

**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 competency test.
- 3) Complete the Competency Test.

**Required reading: None**

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### **Module 3.3: Moot Court**

#### **Training Objectives:**

Successfully complete testimony based on a mock case 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 the Principal Instructor, the Unit Technical Leader, the 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 CCBI Crime Laboratory employee.
- 3) Testify on a mock case in a mock court setting evaluated by the Principal Instructor, Unit Technical Leader, Forensic Quality Manager and/or Crime Laboratory Deputy Director.

Required reading: None

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**Module 3.2 : Moot Court**

~~Learning Objectives:~~

~~An understanding of appropriate testimony techniques for expert witness testimony.~~

~~Training Objectives:~~

~~To demonstrate competency as an expert witness in facial recognition examination.~~

~~Assignments:~~

- ~~4) Become qualified as an expert witness in facial recognition examination and provide the appropriate testimony in an informal moot court session.~~

~~Required reading:~~

~~None~~

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**Module 3.4 ~~3.3~~ : CCBI Certification Casework Authorization**

**Training Learning Objectives:** None

**Methods of Testing Training Objectives:** None

**Training Methods Assignments:**

- 1) Achieve CCBI Certification for Casework Authorization

Required Reading: None

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**TRAINING CHECKLIST**

<b>TRAINEE:</b>		<b>INSTRUCTOR:</b>	
<b>Chapter 1, Module 1.1: Digital Crime Scene, Adobe Photoshop, FACE Plus Facial Recognition Application</b>			
Operational Exhibition of Digital Crime Scene (DCS), Adobe Photoshop (PS), and FACE Plus as they relate to Facial Recognition Requests			
<i>Training Methods</i>		<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Oral discussion/demonstration with the Principal Instructor on the use of DCS			
2. Oral discussion/demonstration with the Principal Instructor on the use of Adobe Photoshop			
3. Oral discussion/demonstration with the Principal Instructor on the use of FACE Plus			
4. Using five facial recognition images, perform the following enhancements: a. Crop the image around the face b. Rotate the image c. Adjust the contrast d. Adjust the exposure			
5. Export the enhanced images from #4 back into DCS			
6. Export the images from #5 to the computer as jpegs for submission into FACE Plus			
7. Print the Call Narrative Report from DCS for the images in #4 and #5			
8. Import at least one (1) image into FACE Plus and send that image for searching			
9. Demonstrate an understanding of the tools available in FACE Plus including 3D Pose Correction			
10. Conduct on-screen reviews of the candidate list resulting from a FR search			
<i>Required Reading</i>		<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Dataworks Plus FACE Plus Case Management User Guide			
2. FISWG Approved Standards, Guidelines, and Recommendations – FR System Methods and Techniques			

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3. Chapter One, <u><i>Criminalistics: an Introduction to Forensic Science</i></u> by Richard Saferstein		
4. CCBI FR Examiner Training Manual		
5. CCBI Standard Operating Procedures		
<b>Chapter 1, Module 1.2: The Anatomy of the Face and Facial Morphological Comparison</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Attend the FBI/CJIS Face Comparison and Identification Training course		
<i>Require Reading</i>		
1. FISWG Approved Standards, Guidelines, and Recommendations – Guidelines for Facial Comparison Methods		
2. FISWG Approved Standards, Guidelines, and Recommendations – Facial Image Comparison Feature List for Morphological Analysis, version 1.0		
<b>Chapter 2, Module 2.1: Preparation for Court and Legal Issues</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Oral discussion/demonstration with the Principal Instructor concerning the creation of enlargements and displays for courtroom presentation		
2. Prepare a court exhibit demonstrating matching characteristics in the probe image and the known image		
3. Create a set of at least six (6) qualifying questions and answers for expert facial recognition testimony		
<b>Chapter 2, Module 2.2: Ethics in Forensic Science</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Oral discussion with the Principal Instructor on ethics topics as related to issues in forensic science		
2. Complete an ethics training course approved by the Forensic Quality Manager		
<i>Required Reading</i>		
	<i>Date Completed</i>	<i>Initials &amp; Comments</i>

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1. ASCLD/LAB Guiding Principles of Professional Responsibility for Crime Laboratories and Forensic Scientists		
2. FISWG Approved Documents – Facial Identification Practitioner Code of Ethics		
<b>Chapter 3, Module 3.1: Facial Recognition Final Written Examination</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Independent review of training material by the Trainee		
2. Discussion of any questions with the Principal Instructor prior to beginning the final written examination		
3. Complete the Final Written Examination		
<b>Chapter 3, Module 3.2: Facial Recognition Competency Test</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Independent review of training material by the Trainee		
2. Discussion of any questions with the Principal Instructor prior to beginning the competency test		
3. Complete the Competency Test		
<b>Chapter 3, Module 3.3: Moot Court</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Discussion with Principal Instructor on courtroom testimony		
2. Observe the courtroom testimony of the Principal Instructor or another CCBI Crime Laboratory employee		
3. Testify on a mock case in a mock court setting with an evaluation		
<b>Chapter 3, Module 3.4: CCBI Certification Casework Authorization</b>		
<i>Training Methods</i>	<i>Date Completed</i>	<i>Initials &amp; Comments</i>
1. Achieve CCBI Certification Casework Authorization		
Case work will be technically reviewed for a period of at least three (3) months		

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TRAINEE SIGNATURE: \_\_\_\_\_

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