

RON SMITH AND ASSOCIATES, INC.

FORENSIC DIGITAL IMAGING FOR LATENT PRINT EXAMINERS: EXTEND YOUR REACH



Class Instructor:
Brian Dalrymple,
CLPE

4 Day Course

32 Training Hours

\$600.00 Tuition

COURSE DESCRIPTION

Based on Adobe Photoshop, relevant plug-ins and other software, this four day workshop is designed to enable the attendee to understand and explain digital theory and methodology. Through extensive hands on exercises, to make an effective image diagnosis and to decide how and when to use these valuable tools in order to extract the maximum amount of information from problem images. We will also cover how to maintain the integrity of both images and procedures through tracking and documentation and present evidence in court.

Topics covered will include:

- * Essential digital theory and techniques
- * How to extract the maximum amount of information from problem images
- * Image diagnosis - how and when to use these valuable tools
- * Legal precedents
- * How to prepare to tender digital evidence
- * The featured software is Photoshop but other software options are also discussed.

Attendees will receive:

- * A tutorial & reference manual covering all information in the workshop
- * A DVD with more than 150 tutorial images and more
- * A custom demo/tutorial copy of ImagePro Plus
- * A certificate of completion

TARGET AUDIENCE

You should attend this course:

- * If you examine crime scenes and exhibits for fingerprints, shoeprints and other types of impression evidence
- * If you suspect that your images contain more critical information than chemistry and conventional photography alone can reveal
- * If you are unsure of the science or legal history behind digital techniques
- * If you do not understand digital theory
- * If you are unsure of the power and reliability of digital techniques
- * If your department is investigating the acquisition of image enhancement software
- * If you have an AFIS and wish to optimize the quality of impressions for search

DAILY SCHEDULE

	Day 1	Day 2	Day 3	Day 4
Hour 1	Module I - Evolution	Module III - Practical Assignments	Module III - Practical Assignments	Module IV - Image Integrity
Hour 2	- Analog v. Digital	- Practical Assignments	- Practical Assignments	- Image Integrity
Hour 3	BREAK	BREAK	BREAK	BREAK
Hour 4	- Digital Glossary - Digital Advantages	- Practical Assignments	- Practical Assignments	- Image Calibration
Lunch	Lunch	Lunch	Lunch	Lunch
Hour 5	Module II - Image Diagnosis	- Practical Assignments	- Practical Assignments	Module V - Court Preparations
Hour 6	BREAK	BREAK	BREAK	BREAK
Hour 7	- Image Problems	- Practical Assignments	- Practical Assignments	- Charting
Hour 8	- Digital Tools	- Practical Assignments	- Practical Assignments	- Charting

SHOULD BE ABLE TO PERFORM

At the completion of this workshop the attendee will:

- * Know and understand the reasons for the extended forensic reach afforded by digital technology
- * Navigate through and apply essential features of Adobe Photoshop
- * Diagnose and triage challenging evidence images
- * Know and understand the different color modes in which digital images may be opened and processed
- * Apply the tools of subtraction, channel blending and Fast Fourier Transform to optimize signal to noise ratio in images
- * Document and track changes and processes to preserve image integrity
- * Cite critical case law and legal precedents relevant to digital evidence



RON SMITH AND ASSOCIATES, INC.**FORENSIC DIGITAL IMAGING FOR LATENT PRINT EXAMINERS: EXTEND YOUR REACH****MUST BRING TO CLASS**

Requirement for each attendee:

- * A laptop computer / Windows XP Professional or later / DVD Drive / 2 GB RAM recommended
- * USB wheel mouse
- * PowerPoint (not essential to attendance – used for charting, which is covered step-by-step in the workshop manual)
- * Adobe Photoshop CS3 or later (CS2 will work but some features of the class are not available in CS2. The latest version - fully operational demo can be downloaded from www.adobe.com just prior to the course for a 30 trial period.)
- * Although tutorial images will be provided, the student is strongly encouraged to bring a digital camera (preferably SLR) and a tripod. There is a digital photography assignment.

RECOMMENDED READING

Photoshop CS3 for Forensic Professionals, Reis, G., Sybex, 2007,

Understanding Forensic Digital Imaging, Blitzer, H., Stein-Ferguson, K., Huang, J., 2008, Academic Press

HOST A CLASS

If you would like to host this class the following facilities are needed:

- * A room with table and chair classroom style seating for 20 people
- * Video/PowerPoint projector and screen
- * Sufficient power outlets for laptops and projector
- * Whiteboard or Flip-chart

