



# THE INSTITUTE FOR FORENSIC IMAGING

in association with

Indiana University Purdue University Indianapolis (IUPUI)



## 2008 COURSE CATALOG (July - December)

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## STUDENT CENTERED TRAINING

The Institute for Forensic Imaging (IFI) is affiliated with the Indiana University School of Science at Indiana University-Purdue University Indianapolis. IFI has developed courses on the basis of surveys and end-of-course evaluations to meet law enforcement needs and to keep up with technology development. IFI courses are designed to train individuals based on the FBI's Scientific Working Group on Imaging Technology (SWGIT) guidelines.

Instructors are chosen for their ability to instruct as well as their experience in law enforcement imaging or related practices.

All IFI courses carry Continuing Education Units (CEU's) and Training Hour credits, which are certified by the Indiana Law Enforcement Training Academy.

Students receive hands-on training using the Institute's top-of-the-line equipment and software, as well as using their own equipment in many IFI courses.

Specially designed courses can be offered at your location or agency.

## REGISTRATION INFORMATION

### **Enrollment:**

Space is limited. Registration deadline is 7 days prior to the start of each class and enrollment is guaranteed when you have registered. If space is not available you will be notified. To receive early registration fees, forms must be received 30 days prior to the start of the class.

### **Change or Cancellation of Classes:**

If we must cancel or postpone a class, you will be notified. Please provide telephone numbers and/or emails so we can contact you.

### **Refunds:**

All class fees will be refunded if you notify us at least 72 hours prior to the first class meeting. Contact us at (317) 356-0245. You may leave a message 24 hours a day.

### **Ways to Register/Pay Enrollment Fees:**

All course fees are preferred, but not required, prior to start of class. An invoice can be sent to your department and/or a department PO can be used.

•**By Mail:** Complete the attached enrollment form and, if sending payment, make your check or money order payable to The Institute for Forensic Imaging and mail to: The Institute for Forensic Imaging, 338 South Arlington Avenue, Suite 111, Indianapolis, IN 46219.

•**By Fax:** Fax the completed enrollment form to (317) 356-0227, including the appropriate payment information.

•**By Purchase Order:** Complete the attached enrollment form and include your departmental purchase order number or request billing on your departmental letterhead with an authorizing signature with the specific amount and mail or fax to IFI.

•**On-Line:** [www.ifi-indy.org](http://www.ifi-indy.org)

### **Location:**

Courses will be held at the Institute for Forensic Imaging located at 338 South Arlington Avenue, Suite 111, Indianapolis, IN 46219.

### **Hotel Accommodations:**

If you need hotel recommendations, please call (317) 356-0245. Also available on our website at [www.ifi-indy.org](http://www.ifi-indy.org).

### **Equipment:**

Students may bring personal or departmental equipment to use in conjunction with IFI's equipment. This practice is recommended in order to fulfill IFI's goal of providing students with training useable on the job with already owned equipment.

# **CRIME SCENE DIGITAL PHOTOGRAPHY**

*(Still and Video)*

**October 13 – 16, 2008, Course#: CSDP 10-008**

This course teaches law enforcement officers how to document a crime scene with high-quality photographs and video. Students will learn the basics of photography and use digital and video cameras to document mock crime scenes. Lectures, discussions, and practical exercises help students put specific techniques into practice.

**Topics Include:**

- ▶ Basic Photography
- ▶ Lenses/Filters
- ▶ Flash Photography
- ▶ Close-up Photography
- ▶ Digital Photography
- ▶ Video Cameras
- ▶ Crime Scene Photography
- ▶ Protocols for documenting crime scenes (still & video)
- ▶ Camera Controls
- ▶ Exposure Controls
- ▶ Lighting Techniques
- ▶ Intro to digital imaging
- ▶ Downloading Images
- ▶ Video Camera Controls
- ▶ Crime Scene Videography

**RECOMMENDED EQUIPMENT:** Digital and Video camera, tripod, macro lens, cable release, 3-foot extension cable for flash and spare batteries. A limited number of loaner still and video cameras are available.

**PREREQUISITE:** A basic understanding of photography is useful.

**COURSE FEE:** Early registration fee is \$600.00, registration form due one month (30 days) before course begins, thereafter; the fee will be \$660.00.

**THIS COURSE AWARDS 32 HOURS OF TRAINING AND 3.2 CONTINUING EDUCATION TRAINING UNITS.**

# **FORENSIC DIGITAL IMAGING, PHASE I**

**July 21 – 24, 2008, Course#: FDII 07-008**

**November 3 – 6, 2008, Course#: FDII 11-008**

This course, by conference, demonstration and practical “hands-on” training, teaches the basics of Adobe Photoshop, the use of digital cameras, scanners, computers and digital imaging methods to produce quality images for law enforcement professionals. The selection and use of equipment for efficient imaging as well as the handling of digital images in accordance with established standards will be stressed.

## **TOPICS INCLUDE:**

- ▶ System Diagnostics
- ▶ Image enhancement methods
- ▶ Digital cameras
- ▶ Archiving images
- ▶ Special filters for enhancing images
- ▶ Standard Operating Procedures
- ▶ Adobe PhotoShop
- ▶ History logs
- ▶ Downloading images
- ▶ Film and flatbed scanners
- ▶ Digital darkrooms
- ▶ Digital Printers

**RECOMMENDED EQUIPMENT:** Digital camera kit (but not required).

**PREREQUISITE:** A basic understanding of photography and computers.

**COURSE FEE:** Early registration fee is \$600.00, registration form due one month (30 days) before course begins, thereafter; the fee will be \$660.00. Course fee includes a copy of Forensic Digital Imaging and Photography handbook published by Academic Press.

**THIS COURSE AWARDS 32 HOURS OF TRAINING AND 3.2 CONTINUING EDUCATION TRAINING UNITS.**

## **FORENSIC DIGITAL IMAGING, II**

**July 8 – 11, 2008, Course#: FDIII 07-008**

**November 17 – 20, 2008, Course#: FDIII 11-008**

This course, by conference, demonstration and practical “hands-on” training teaches advanced tools in Adobe PhotoShop to produce quality images for law enforcement professionals. Phase II, demonstrates and teaches Adobe PhotoShop in much greater depth than Phase I, therefore a working knowledge of PhotoShop is required.

### **TOPICS INCLUDE:**

- ▶ Image control and adjustments
- ▶ ICC Profiles
- ▶ Special plug-in filters
- ▶ Advanced photographic techniques
- ▶ Working with Raw Images
- ▶ Verifying Primary Images
- ▶ Color Management
- ▶ Layers, masks, and channels
- ▶ Alternative lighting
- ▶ Expanding Dynamic Range
- ▶ Hashing images
- ▶ Construct 1:1 Composites

**RECOMMENDED EQUIPMENT:** Digital camera kit (but not required).

**PREREQUISITE:** Applicants should have completed Forensic Digital Imaging Phase I or have equivalent experience using Adobe PhotoShop, digital cameras and scanners.

### **COURSE FEE**

Early registration fee is \$600.00, registration form due one month (30 days) before course begins, thereafter, the fee will be \$660.00.

**THIS COURSE AWARDS 32 HOURS OF TRAINING AND 3.2 CONTINUING EDUCATION TRAINING UNITS.**

# **FORENSIC DIGITAL IMAGING, PHASE III**

(Dates TBA)

This course, by conference, demonstration and practical “hands-on” training is designed for people who have training and experience in capturing and processing digital images. The science behind the functions and equipment will be discussed. Students will be able to explain processes to a jury and to answer questions on why certain tools were used and how they work. While this is not a course in mathematics, students will use basic arithmetic to compute findings using simple formulae. New equipment/techniques will be discussed.

## **TOPICS INCLUDE:**

- ▶ Measurements and scales used in photography
- ▶ Color sensitivity and factors controlling camera or scanner response
- ▶ Basic filters and how they work
- ▶ Interpolation tools and how they work
- ▶ New equipment and techniques
- ▶ Lenses, lens formulas, and how to set up special assignments
- ▶ Factors controlling resolution and how to set up to achieve a target resolution
- ▶ Calculations that the camera makes or that you make when you process an image in raw format

**PREREQUISITE:** Forensic Digital Imaging, Phase I & II or equivalent experience.

## **COURSE FEE:**

Early registration fee is \$450.00, registration form due one month (30 days) before course begins, thereafter, the fee will be \$495.00.

**THIS COURSE AWARDS 24 HOURS OF TRAINING AND 2.4 CONTINUING EDUCATION TRAINING UNITS.**

# **DIGITAL IMAGING FOR MANAGERS**

**August 11 – 12, 2008, Course#: DIC 08-008**

This course, by conference, demonstration and practical “hands-on” training teaches how to set up an image workflow for managing digital files and write the standard operating procedure necessary when working with digital images. Managing the digital workflow and files created through the use of digital cameras has become a tremendous task. Ensuring that they are not compromised is an absolute necessity. As with many other law enforcement operations, the way to achieve benefits without undue exposure to law related questions is through the development and implementation of effective SOP’s. This segment will review all areas of concern, describe the process for developing SOP’s and provide references for agencies interested in developing SOP’s.

## **TOPICS INCLUDE:**

- ▶ Establishing a workflow
- ▶ Archive images
- ▶ Legal challenges
- ▶ Scientific Working Group on Imaging Technology (SWGIT) standards.
- ▶ Protecting images
- ▶ Types of images
- ▶ Constructing an SOP

**PREREQUISITE:** A good working knowledge of Digital Imaging.

**COURSE FEE:** Early registration fee is \$300.00, registration form due one month (30 days) before course begins, thereafter; the fee will be \$330.00.

**THIS COURSE AWARDS 16 HOURS OF TRAINING AND 1.6 CONTINUING EDUCATION TRAINING UNITS.**

# **PREPARING COURTROOM PRESENTATIONS**

**August 13 – 14, 2008, Course#: CFFR 08-008**

This course, by conference, demonstration and practical “hands-on” training teaches how to prepare your exhibits using both hard copies and an electronic presentation. What to include in the presentation and how best to present it will be included. The course covers both the expert witness presenting there visuals in court and from the prosecutors point-of-view, such as opening and closing arguments. A slide presentation program is taught that can be used for an electronic presentation in court and for preparing hard-copy visuals.

## **TOPICS INCLUDE:**

- ▶ Presentation Software
- ▶ Presentation Techniques
- ▶ What to include in the presentation
- ▶ How to present presentations
- ▶ How to prepare hard-copy presentations
- ▶ How to prepare an electronic presentation
- ▶ Creating and presenting a courtroom presentation

**PREREQUISITE:** A good working knowledge of computers.

**COURSE FEE:** Early registration fee is \$300.00, registration form due one month (30 days) before course begins, thereafter; the fee will be \$330.00.

**THIS COURSE AWARDS 16 HOURS OF TRAINING AND 1.6 CONTINUING EDUCATION TRAINING UNITS.**

# **VIDEO CAPTURE, ENHANCEMENT AND ANALYSIS**

**September 16 – 18, 2008, Course#: VCE 09-008**

This course, by conference, demonstration and practical “hands-on” training, teaches how to capture, enhance and analyze both analog and digital video through the use of a video imaging workstation. CrimeVision, Adobe Premiere, Adobe PhotoShop and special video tools developed by the institute are used to edit and extract data from both the still and video digital images for analysis. Use and selection of equipment for efficient video capture, enhancement and analysis are covered in detail.

## **TOPICS INCLUDE:**

- ▶ Introduction to Video
- ▶ Adobe Premiere
- ▶ Video Capture Workstation
- ▶ Video Acquisition (analog & digital)
- ▶ Video Restoration
- ▶ Field Alignment
- ▶ Video Stabilization
- ▶ CrimeVision
- ▶ Adobe PhotoShop
- ▶ Demultiplexing
- ▶ De-Quad
- ▶ Frame Averaging
- ▶ Rescale
- ▶ Archiving

**PREREQUISITE:** Completion of Forensic Digital Imaging, Phase I is recommended or equivalent experience.

**COURSE FEE:** Early registration fee is \$450.00, registration form due one month (30 days) before course begins, thereafter, the fee will be \$495.00.

**THIS COURSE AWARDS 24 HOURS OF TRAINING AND 2.4 CONTINUING EDUCATION TRAINING UNITS.**

# **EVIDENCE TECHNICIAN**

(Dates TBA)

Forensic evidence found, properly collected and preserved at a crime scene is of primary importance in establishing the fact of the offense and the identity of the perpetrator. “Evidence Technician” instructs in the correct handling of evidence until it is presented in court.

## **TOPICS INCLUDE:**

- ▶ Protocols for documenting, collecting and identifying evidence
- ▶ Sketching/photographing crime scenes
- ▶ Establishing a chain of custody
- ▶ Constructing an evidence locker
- ▶ Avoiding contamination of evidence
- ▶ Collecting/preserving common types of evidence to include drugs and autopsy evidence
- ▶ Casting a shoe, tire and tool imprints
- ▶ Forensic light source applications
- ▶ There will be a discussion of forensic laboratory processes available for analysis of evidence to include DNA.
- ▶ Rules of evidence
- ▶ Preparing an evidence log
- ▶ Developing a crime kit

**RECOMMENDED EQUIPMENT:** Digital camera, appropriate flash, sync cord extension, and tripod.

**PREREQUISITE:** None.

**COURSE FEE:** Early registration fee is \$750.00, registration form due one month (30 days) before course begins, thereafter; the fee will be \$825.00 for each course. Fees include the textbook and handouts.

**THIS COURSE AWARDS 40 HOURS OF TRAINING AND 4.0 CONTINUING EDUCATION TRAINING UNITS.**

## INSTITUTE FOR FORENSIC IMAGING 2008 COURSE REGISTRATION

**FAX TO: 317-356-0227----ATTENTION: KRISTY TRUMPEY**

Please register me for the following course(s). One registration form per person. Please reproduce form as necessary. **Early fee applies if registration is received 30 days prior to start of class.**

<u>Course</u>	<u>Inclusive Dates</u>	<u>Early Fee</u>	<u>Regular Fee</u>
Crime Scene Digital Photography	<input type="checkbox"/> October 13 <sup>th</sup> – 16 <sup>th</sup>	<input type="checkbox"/> \$600.00	<input type="checkbox"/> \$660.00
Forensic Digital Imaging, Phase I	<input type="checkbox"/> July 21 <sup>st</sup> – 24 <sup>th</sup> <input type="checkbox"/> November 3 <sup>rd</sup> – 6 <sup>th</sup>	<input type="checkbox"/> \$600.00	<input type="checkbox"/> \$660.00
Forensic Digital Imaging, Phase II	<input type="checkbox"/> July 8 <sup>th</sup> – 11 <sup>th</sup> <input type="checkbox"/> November 17 <sup>th</sup> – 20 <sup>th</sup>	<input type="checkbox"/> \$600.00	<input type="checkbox"/> \$660.00
Forensic Digital Imaging, Phase III	<input type="checkbox"/> TBA	<input type="checkbox"/> \$450.00	<input type="checkbox"/> \$495.00
Digital Imaging for Managers	<input type="checkbox"/> August 11 <sup>th</sup> – 12 <sup>th</sup>	<input type="checkbox"/> \$300.00	<input type="checkbox"/> \$330.00
Preparing Courtroom Presentations	<input type="checkbox"/> August 13 <sup>th</sup> – 14 <sup>th</sup>	<input type="checkbox"/> \$300.00	<input type="checkbox"/> \$330.00
Video Capture, Enhancement and Analysis	<input type="checkbox"/> September 16 <sup>th</sup> – 18 <sup>th</sup>	<input type="checkbox"/> \$450.00	<input type="checkbox"/> \$495.00
Evidence Technician	<input type="checkbox"/> TBA	<input type="checkbox"/> \$750.00	<input type="checkbox"/> \$825.00

\_\_\_\_\_ **Fee Total**

*Discounts are available if your agency enrolls two (2) or more students in the same course "Please Call for Information."*

**The Forensic Digital Imaging and Photography Handbook** is supplied with the Forensic Digital Imaging, Phase I course. The book is available at a discounted rate of \$60.00 during Forensic Digital Imaging, Phase II. The book may be purchased at a 10% discounted rate from the Institute at any time for \$72.00 plus shipping and handling.

<b>Name</b>	<b>Rank</b>	<b>Department</b>	<b>Email</b>
<b>Department/Agency Name</b>		<b>Phone/Fax Number</b>	
<b>Department Address</b>		<b>City, State, Zip Code</b>	

**Ways to Register:**

All course fees are preferred, but not required, prior to start of class. An invoice can be sent to your department and/or department PO can be used.

Attention: \_\_\_\_\_

Purchase Order#: \_\_\_\_\_

Authoring Name: \_\_\_\_\_

## **VISIT OUR WEBSITE AT:**

**www.ifi-indy.org  
for further information on:**

- IFI Background**
- Current course catalog and registration form**
- Research projects**
- IFI's publications**
- Scientific Working Group on Imaging Technology (SWGIT) link**
- Scientific Working Group on Digital Evidence (SWGDE) link**
- E-mail links to the IFI staff**

### **ADDITIONAL INFORMATION**

IFI is also available for other law enforcement needs:

**Consulting and Research:** The IFI staff will share their knowledge of equipment, software, and procedures to ensure the highest quality results based upon the needs of the department or agency requesting such information.

**Constructing Computer Systems:** IFI has constructed, tested and installed digital imaging darkrooms throughout Indiana to include Carmel Police Department, Greenwood Police Department, Anderson Police Department, and State Police labs in Lowell, Fort Wayne, Post 52 and the Indianapolis-Marion County Forensic Services Agency. The IFI staff is available to construct a system designed for your specific needs with continued support available after installation. The training of system operators is included in the contract.

#### **Video Capture & Enhancement Systems Contact:**

Imagine Products, Inc.  
Phone: (317) 843-0706  
Fax: (317) 843-0807  
E-Mail: sales@CrimeVision.net  
Web: www.ImagineProducts.com

**Video/Still Image Enhancement:** The IFI laboratory staff is available to do video/still image enhancement and analysis for law enforcement agencies and lawyers.

**Guest Lectures and Demonstrations:** The IFI staff is available to speak and conduct digital imaging demonstrations at conferences and other events.

IFI OFFERS ON-SITE TRAINING

IFI courses were developed on the basis of surveys of practical industry needs, technology evolution, and consistency with industry norms. Instructors follow approved course outlines to assure that all students are taught the full range of topics selected for the particular course. Compliance with the guidelines of the Scientific Working Group on Imaging Technology (SWGIT is sponsored by the FBI) is stressed.

IFI can conduct courses at your site for better convenience. These courses include:

- Forensic Digital Imaging, Phase I
- Forensic Digital Imaging, Phase II
- Forensic Digital Imaging, Phase III
- Crime Scene Digital Photography
- Digital Images for Managers
- Presentations for the Courtroom

Some of the courses require the requesting agency to furnish a computer lab.

If necessary, these courses can be tailored to meet specific needs of the requesting department or agency.

Specialized training is also available for those agencies transitioning to digital to ensure that all personnel are familiar with the equipment and the new procedures that will be used with digital images.

ON-SITE COURSE FEES

<u>Course Length</u>	<u>Registration Fee</u>
2-days	\$300.00 per enrollee
3-days	\$450.00 per enrollee
4-days	\$600.00 per enrollee
5-days	\$750.00 per enrollee

**On-Site courses:** Minimum of 10 Students—Maximum of 20  
Courses can be constructed/modified/combined to meet agency needs.  
Requesting agency must furnish classroom, equipment, software, etc, depending on the course requested.  
IFI will furnish all training materials and any special equipment needed for the course.

**On-Site Cost:** 10 students x registration fee + expenses (minimum).  
Any students enrolled over 10 will be charged one-half of the registration fee.

**Expenses:**

Travel	(University Rate)
Per Diem	(University Rate)
Lodging	(University Rate)

Discounts are available for multiple courses scheduled at different times in the same calendar year.