

# **COURSE DESCRIPTION**

**Lessons in the history and use of imagery, photography and legal decisions related to the admissibility of photographs. The basics of exposure including ISO, shutter speed, aperture, depth of field, light metering, filters, tripods, and the use of various artificial lights.**

**This 5-day course will focus on the best photographic techniques, tools and equipment for photographing firearms, tools, toolmarks, and ammunition components commonly encountered in forensic casework.**

**Students will learn a variety of lighting techniques for photographing firearm/toolmark evidence including LED, fluorescent, electronic flash, polarized light, cross polarized light, darkfield illumination, transillumination, and infrared light.**

**Students will create casts of tools and firearm components to photo document the presence or absence of subclass characteristics. They will examine and photograph pieces of metal that have been machined by a variety of methods commonly used to manufacture tools and firearm components. These reference photos can be used throughout their career to identify machining methods observed on items encountered in casework.**

**Using their SLR with a macro lens and a comparison microscope, students will photograph bullets of various calibers and**

**E105 Digital Imaging  
for the Firearm and  
Toolmark Examiner**

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Criminalistics  
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**designs which have been fired through a variety of common building materials and vehicle components. These reference photographs can be used to aid in determining potential materials observed on evidence bullets in future casework.**

**Students will use provided Infrared camera equipment to photograph gunshot residue patterns on dark colored clothing. They will also learn how to photo document bullet impact sites in various surfaces using several chemicals and how to photo document trajectory paths using the probe and string method and laser method.**