



## W21 Forensic Photography and the Exposure Triangle: What Every Forensic Professional Should Know About ISO, Depth of Field (DOF), and Shutter Speed (SS)

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After attending this presentation, attendees will better understand the proper use of a Digital Single-Lens Reflex (DSLR) camera for crime scene, sexual assault, autopsy, and laboratory work. Specific focus will be placed on understanding the "exposure triangle," which includes settings for ISO, DOF, and SS, and the importance of knowing how to adjust each component in order to properly capture forensic evidence for presentation at a later date in a criminal or civil trial. In addition, best practices and legal standards will be presented. Compression levels and when to utilize which level of compression will be taught, so attendees can properly image crime scenes and other forensic evidence in the proper format. Attendees will learn how to utilize a DSLR camera in the *Manual* mode, instead of failing to properly capture forensic images in the *Automatic* mode. Attendees will be exposed to common crime scene photography practices, such as, "fill-flash", "back-lighting," "fill-the-frame," "film plane parallel," omitting blur, maximizing depth of field, and concepts of Painting With Light (PWL) for low-light situations. Attendees will understand how each of these principles should be applied to imaging crime scenes, physical evidence, deceased individuals, and living sexual assault victims and suspects. Forensic science professionals in all disciplines that are charged with taking forensic photographs, or those who are tasked with properly understanding the proper legal formatting of forensic images will benefit from this workshop.

This presentation will impact the forensic science community by providing professionals with a greater understanding of how photography is one of the three primary means of documenting crime scenes, autopsy findings, physical injury, and forensic evidence; yet, it remains the least-understood and least-trained discipline. This training will enhance the attendees' knowledge and competency when using a DSLR camera in the performance of their duties to properly document crime scenes and forensic evidence.

Despite law enforcement and forensic science professionals exposing a plethora of images each year in the performance of their duties; only a small number of these images are introduced into the courtroom. This is despite jurors wanting and even expecting, to see high-quality images of crime scenes, injuries, and other physical evidence. All too often, images exposed in an attempt to capture the various forensic evidence found at crime scenes and other forensic settings are lacking in quality or do not meet the basic legal standards required. In response to these recognized deficiencies, attendees will learn the basic legal requirements for introducing properly formatted images into the courtroom; including, when to utilize RAW uncompressed – lossless – settings. Informal surveys of forensic science and law enforcement professionals have shown repeatedly that most law enforcement and crime scene photographers do not understand the nuances in compression levels (such as when to utilize JPEG vs. RAW) in general crime scene work when capturing critical comparison or evidence quality images.

## Forensic Photography, Crime Scene Photography, Sexual Assault Nurse Examiner

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