## 10 Days: Bloodstains; Firearms, Ammunition, & Shooting Incident Reconstruction

Day 1: Introduction to Bloodstain Fundamentals

- Safety and blood composition
- Principles, theories, and terminology
- · Height, angle, and surface effects

#### Day 2: Recognizing Patterns: Spatter, passive, and altered

- Identifying visual characteristics
- Measurement and calculations

## Day 3: Documentation & Photography

- Individual bloodstains vs. patterns
- Photography techniques for analysis

### Day 4: Enhancement

- Search and identification on-scene
- Chemical enhancement
- Fabric substrates
- Report writing and courtroom testimony

### Day 5: Hands-On Practice Scenario

- Calculating area of convergence and origin
- Scene documentation
- Report drafts and review

# Day 6: Introduction to Firearms & Ammunition

- Design and function
- Physics of projectile motion
- Evidence identification, documentation, and organization

## Day 7: Ballistics & Relationships

- Gunshot wound ballistics
- Interrelationships of wounds and other evidence
- Determining muzzle-to-target distances

## Day 8: Trajectory Analysis

- Mathematical principles
- Rodding, laser, trigonometry, and stringing techniques
- Shooting event reconstruction

#### Day 9: Bullets vs. Materials

- Demonstration and analysis of interactions: glass, metal, concrete, wood, vehicles, bone, dirt
- Review of, and challenges to, common perceptions

# Day 10: Hands-On Practice

- Comprehensive scenario investigation (team activity)
- Report writing for shooting incident reconstruction
- Review and discussion of case studies



Additional Topics Available:
Biological Screening, Rapid DNA
Sample Collection & Analysis,
Field Drug Detection, Latent Print
Development and Documentation

