FORZA FORENSICS
Passion. Experience. Diligence.

Introduction to Shooting Reconstruction Course Syllabus (36 Hours)

Course Target Audience

Crime scene investigators, officers and detectives who would respond to shooting incidents.

Course Objectives

Basic firearm and ammunition construction and terminology

Firearm documentation, recovery, and safety considerations

Trajectory analysis & projectile performance through multiple barrier types

Vehicle specific trajectory elements

Ricochet evaluations (trajectory and recovered projectiles)

Distance determination and ejection pattern analysis

Specialty ammunition and unusual examples

Forensic Intelligence Gathering Topics

Basic and advanced forensic laboratory services

Officer Involved Shooting Specific Considerations

Required Equipment

Ear & eye protection

Schedule

Day one. (8 hours)

Introductions

Module 1 – Firearms Overview

- Safety rules for range
- General firearms & evidence safety
- Correct terminology
- Modern firearm operating systems & safety

Module 2 – Documentation & Trajectory Measurements

- Photography
- Tools used to measure trajectory
- Trajectory measurements
- Scene diagramming
- Directionality of shots

Practical Exercise 1 – Mock walls with Impacts

Day one written quiz*

Day two. (8 hours)

Practical Exercise 1 – Mock walls with impacts (cont')

Module 3 – Projectiles and Various Surfaces

- Yielding vs. unyielding surfaces
- Richocet
- Glass
- Sheet metal
- Tires
- Ejection patterns

Module 4 – Chemicals Related to Firearms

- GSR
- Chemical testing

Day two written quiz*

Day three. (8 hours)

RANGE DAY

Module 4 – Range Vehicle Shoot

- Known angles & measurements
- Vehicle glass
- Tires
- Mismatched calibers
- Different velocities

Module 5 – Ricochet Shoot

- Sheet metal
- Wood
- Glass
- Yielding vs. Unyielding

Multiple Practical Exercises for Modules 4 & 5

Module 6 – Additional Range Exercises

- Shotgun ballistics
- Ejection patterns
- Chemical tests

Practical Exercise 2 – Sodium Rhodizonate Test

Day four. (8 hours)

Module 7 – Range Day Review

- Question & answer session
- Compare measurement data

Module 8 – Additional Firearms Topics

- Wound ballistics
- Long range shooting
- Case studies

Final Practical Exercise

Final Practical Review

Final written test*

Certificate ceremony

*Quizzes and tests are used for students to self-asses only. Grades are not recorded by instructor.