

Firearm/Toolmark Training Record

Trainee Name: _____ Training Coordinator: _____

Each section in the chart below must be initialed and dated upon completion of the specified module. If any task is not completed, for any reason, this must be explained in the training file and approved by the Physical Evidence Program Manager.

The start date listed below is the day training began, the completion date is the date the trainee successfully completes the competency test.

Start Date: _____ Completion Date: _____

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MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
1 Introduction and Orientation		Firearm Safety Training Written Examination			
2 Evidence Handling		Practical Exercises <ul style="list-style-type: none"> • Demonstration of section evidence handling and storage procedures • Demonstration of proper chain of custody practices Written Examination			
3 Cognitive Factors in Comparative Analysis					
4 Instrumentation		Practical Exercises <ul style="list-style-type: none"> • Stereo microscopes • Comparison microscope photography • Comparison microscope set-up • Four cartridge cases • Four bullets • Equipment performance check 			

MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
5 Machining Processes		Practical Exercises <ul style="list-style-type: none"> • Machining processes specimen class characteristics and surface features • Shavings 			
6 Introduction to Firearm and Toolmark Identification		Practical Exercises <ul style="list-style-type: none"> • Casting techniques and materials • Screwdriver marks • 10 sets of known matches & known non-matches • Cadre Virtual Microscopy Viewer sample sets • Unknown comparison set • Subclass casts and toolmarks 			
7 Firearm and Toolmark Evidence Admissibility Criteria and Defense		Presentations <ul style="list-style-type: none"> • Daubert • 2009 NAS • 2016 PCAST report 			
8 History of Firearms Identification and Current Trends		Presentation <ul style="list-style-type: none"> • Basic History of Firearms Identification 			
9 Historical Development		Practical Exercise <ul style="list-style-type: none"> • Summary of museum collection 			

MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
10 Ammunition		Practical Exercises <ul style="list-style-type: none"> • Ammunition manufacturing facility • Ammunition description terms • Different cartridges in .22, .30, and .38 caliber families • Determine gauge and shot size of wad and pellet samples • Bullet samples Written Examination			
11 Firearm Manufacturing & Examinations		Practical Exercises <ul style="list-style-type: none"> • Rifled barrel determination • Manufacturing technique presentation • Armorer training 			
12 Revolvers		Practical Exercises <ul style="list-style-type: none"> • Demonstration of safety techniques • 32 Auto bullets/cartridge cases fired from/in a 32 S&W firearm • 38 Special bullets/cartridge cases fired from/in a 357 Magnum • Harrington and Richardson Model 622, caliber 22 Long Rifle • Iver Johnson model Top Break, caliber 32 Smith & Wesson • Smith & Wesson model 686, caliber 357 Magnum • Colt model Lawman, caliber 357 Magnum • Ruger model Security Six, caliber 357 Magnum 			

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13 Pistols		Practical Exercises <ul style="list-style-type: none"> • Demonstration of safety techniques • 380 Auto bullets/cartridge cases fired from/in a 9mm Luger firearm • 380 Auto bullets/cartridge cases fired from/in a 9mm Makarov firearm • 40 S&W bullets/cartridge cases fired from/in a 10mm Auto firearm • 45 GAP bullets/cartridge cases fired from/in a 45 Auto firearm • 357 SIG. bullets/cartridges fired from/in a 40 S&W firearm • Ruger model MKII, caliber 22 Long Rifle • Jennings model J-22, caliber 22 Long Rifle • Beretta model 950BS, caliber 25 Auto • Raven model P-25 or MP-25, caliber 25 Auto • Cobra Enterprises model FS32, caliber 32 Auto • Bersa model Thunder 380, caliber 380 Auto • Ruger model LCP, caliber 380 Auto • Walther model PPK, caliber 380 Auto • Baikal model IJ-70, caliber 9mm Makarov • Beretta model 92, caliber 9mm Luger • Intratec model Tec-9, caliber 9mm Luger • Jimenez Arms model J.A. Nine, caliber 9mm Luger • Kel-Tec model P-11, caliber 9mm Luger 			

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		<ul style="list-style-type: none"> • Hi-Point model C9, caliber 9mm Luger • Ruger P-series, caliber 9mm Luger • Glock model 31, caliber 357 SIG • Ruger model SR40c, caliber 40 S&W • Springfield Armory model XD-40, caliber 40 S&W • Smith & Wesson model 1006, caliber 10 mm Auto • IMI/Magnum Research model Desert Eagle, caliber 357 Magnum • Colt model 1911A1, caliber 45 Auto • Taurus model PT 145 Millennium Pro, caliber 45 Auto • Heckler & Koch Model USP semiautomatic pistol, caliber 45 Auto 			
14 Rifles		<p>Practical Exercises</p> <ul style="list-style-type: none"> • Demonstration of safety techniques • Winchester model 94 caliber 30-30 Winchester • Savage model 340 Series E caliber 30-30 Winchester • Norinco Type 56S (or other AK-type) caliber 7.62x39mm • Norinco model SKS rifle (or other SKS-type) caliber 7.62x39mm • Colt model HBAR rifle (or other M16/AR15 type) caliber 223 Remington • Ruger model Mini-14 caliber 223 Remington 			

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15 Shotguns		Practical Exercises <ul style="list-style-type: none"> • Demonstration of safety techniques • Harrington & Richardson Topper Model 158, 12 gauge (shortened barrel) • Remington model 1100, 12 gauge (or other gas-operated shotgun) • Browning model Light Twelve or Auto 5, 12 gauge • Mossberg model 500A, 12 gauge 			
16 Unique Situations in Firearms Examinations		Practical Exercises <ul style="list-style-type: none"> • Four firearms 			
17 Bullet, Shotshell Components and Cartridge Case Examinations		Practical Exercises <ul style="list-style-type: none"> • Ten cartridge cases • Ten bullets • Ten sets of two firearms • Test fired cartridge cases from 9mm Luger Smith & Wesson (Sigma Series with elliptical FP) • Test fired cartridge cases from 9mm Luger Glock (Elliptical FP) • Test fired cartridge cases from Luger Springfield (XDS with elliptical FP) • Test fired cartridge cases from 9mm Luger Smith & Wesson (Sigma series with D/Oval shaped FP)-2 sets • Test fired cartridge cases from 9mm Luger Smith & Wesson (M&P series with Hemispherical FP and teardrop shaped aperture)-2 sets 			

MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
		<ul style="list-style-type: none"> • Test fired cartridge cases from 9mm Luger Glock (D shaped FP and teardrop shaped aperture)-2 sets • Bullets from consecutively manufactured barrels <p>Practical Examination</p>			
18 NIBIN		<p>Practical Exercises</p> <ul style="list-style-type: none"> • Ten correlation results reviewed • Ten cases entered, reviewed and verified 			
19 Gunshot Residue and Distance Determination		<p>Practical Exercises</p> <ul style="list-style-type: none"> • Prepare necessary materials for conducting distance determination evaluations/examinations • Microscopic evaluation and direct chemical processing of white fabric sample(s) • Microscopic evaluation and chemical processing using transfer techniques of dark fabric sample(s) • Non-porous materials, chemical processing • Test fire and evaluate “complex” gunshot residue samples • Firearm, ammunition, unknown pattern, distance determination • Evaluate pellet patterns • Effect of a rifled barrel on pellet patterns • Firearm, ammunition, unknown pellet pattern, distance determination <p>Practical Examination</p>			

MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
20 Number Restoration		Practical Exercises <ul style="list-style-type: none"> • Safe handling of chemicals • Number restorations • Magnetic particle inspection restorations • Bar code decryption • Alphanumeric serial number combinations, font styles and “secondary”/hidden serial numbers • Heat procedure used for restorations in plastic • Unknown bar code serial number decryption • Unknown serial number restoration 			
21 Report Writing, Expert Testimony, and Professionalism		Practical Exercises <ul style="list-style-type: none"> • Note taking, chain of custody and report writing • File maintenance and courtroom testimony monitoring • Familiarization with report formats and phraseology • Operation of local, state and federal law enforcement agencies and court systems • Observe examiners testifying • Round table discussion • Accreditation standards • Qualification questions • Laboratory policy regarding the reexamination of evidence • Verbal results prior to issuance of a final laboratory report, inquiries from the press and other media, providing a laboratory report to other agencies and Medical Examiner, subpoena 			

MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
		policy, case file policies, SDT, FOIA, deposition requests <ul style="list-style-type: none"> • Proficiency testing • Case file reviews using Technical Review Form • Complete an audit trail worksheet • Mock case in LIMS 			
22 Uncertainty of Measurement		Practical Exercises <ul style="list-style-type: none"> • Testimony description of Uncertainty of Measurement 			
23 Toolmark Examinations and Comparisons		Practical Exercises <ul style="list-style-type: none"> • Shearing, pinching, slicing, scrape mark and impression action toolmarks • "A" and "B" tools-test marks with two different tool types in each toolmark category above • "A" and "B" test mark comparisons in lead-known and known non-matches • Cast test marks and perform comparisons • Comparison of shearing/pinching • Comparison of flat-bladed tool • Comparison of impression tool • Doorknob and a serrated-jawed tool examination • Telephone cable cut with pinching type tool examination • Saws and blades • Files • Tire and rubber hose 			

MODULE	ORAL SESSION(S)	ASSIGNMENTS	MODULE COMPLETION DATE	TC INITIALS	TRAINEE INITIALS
		<ul style="list-style-type: none"> • Knife Identification Project AFTE 2002 Kit #41 Practical Examinations			

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Firearm - Competency Examination

Technical Final

Date: In Attendance:

Outcome: Satisfactory Not Satisfactory

Comments:

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Practical Examination

Outcome: Satisfactory Not Satisfactory

Comments:

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Mock trial

Date: In Attendance:

Outcome: Satisfactory Not Satisfactory

Date of videotape review:

Comments:

Toolmark – Competency Examination

Technical Final

Date: In Attendance:

Outcome: Satisfactory Not Satisfactory

Comments:

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Practical Examination

Outcome: Satisfactory Not Satisfactory

Comments:

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