Training Checklist for Paint Examinations

Module 1: Preparation for Analysis

1. The trainee's progress will be monitored:

	Date Completed	Initials
Acquired and cataloged at least 50 paint samples		
Has read the reading assignments		

2. Evaluation

Pass a written test		
Given 3 scenarios, correctly explains the appropriate samples and standards to collect.		

Module 2: Basic Microscopy and Search Techniques

1. The trainee's progress will be monitored:

	Date Completed	Initials
Trainee is familiar with the properties of paint that can be viewed using PLM.		
Can collect paint from articles of clothing		
Can operate the stereomicroscope, polarized light microscope, reflected light microscope and comparison microscope		
Can perform basic microscope cleaning and maintenance		
Has read the reading assignments		

2. Evaluation

Pass a written test		

Module 3: Stereomicroscopy of Paint

1. The trainee's progress will be monitored:

	Date Completed	Initials
Can cross section samples		
Can thin peel layers		
Has visually characterized the previously collected paint samples.		
Successfully collects paint smears.		
Can search debris from clothing and locate paint and polymers		
Has read the reading assignments		

2. Evaluation

Given three samples of paint, examine and document the samples.		
Found the correct number of paint particles in the debris, described each paint particle found and determined whether the particles appear to be automotive in origin.		

Form Approved For Use By: Jennifer L. Remy

Module 4: Microsolubility and Microchemical Testing

1. The trainee's progress will be monitored:

	Date Completed	Initials
Uses proper technique to perform solubility testing.		
Solubility tests the required number of samples.		
Has read the reading assignments		

2. Evaluation

Given four paint samples, perform the microsolubility/ microchemical tests on each sample, record the results, and explain what the results mean about the paint sample.		
Pass a written test		

Module 5: FT-IR

1. The trainee's progress will be monitored:

	Date Completed	Initials
Can operate the section FTIRs		
Can explain in lay terms how the FTIR works		
Has acquired IR spectra of all layers of paint samples		
Has identified the major components of the previously acquired spectra.		
Successfully obtains IR spectra of paint smears.		
Has read the reading assignments		

2. Evaluation

Given 3 North Carolina PDQ samples, properly document and analyze each sample using FTIR.		
Identified and documented the major components in the spectrum of 5 spectra.		
Pass a written test		

Module 6: Microspectrophotometry

1. The trainee's progress will be monitored:

	Date Completed	Initials
Can embed samples for microtomy		
Can operate the section microtome.		
Can explain in lay terms how the microspectrophotometer works		
Analyzed similarly colored samples		
Has read the reading assignments		

2. Evaluation

Pass a written test		

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Module 7: Pyrolysis – GC/MS

1. The trainee's progress will be monitored:

	Date Completed	Initials
Can explain in lay terms how the py-gc/ms works		
Can prepare samples for py-gc/ms analysis		
Observed py-gc/ms operator run samples and discussed interpretation		
Has read the reading assignments		

2. Evaluation

Given 5 sets of chromatograms, interpret the chromatograms and decide whether the paint samples were consistent, not consistent, or similar and why.		
Pass a written test		

Module 8: SEM-EDS

1. The trainee's progress will be monitored:

	Date Completed	Initials
Can explain in lay terms how the SEM-EDS works		
Can prepare samples for SEM analysis		
Observed SEM operator run samples and discussed interpretation		
Has read the reading assignments		

2. Evaluation

Pass a written test		

Module 9: PDQ

1. The trainee's progress will be monitored:

	Date Completed	Initials
Has read the reading assignments		
Code all previously acquired spectra for entry into the database		
Given 2 sets of IR spectra, code and search the database. Report results.		

2. Evaluation

Given five spectra, code for search through the database.		
Given one paint sample, describe, analyze using IR and SEM, code IR spectra, and search through the database. Report the results in writing.		
Pass a written test		

Module 10: Physical Match

	Date Completed	Initials
1. The trainee's progress will be monitored:		
Successfully completed the rigid materials module of the Physical Match Training Outline		
Has read the reading assignments		
2. Evaluation		
Review and discuss readings and exercises		

Module 11: Case Work

	Date Completed	Initials
1. The trainee's progress will be monitored:		
Understands the possible conclusions of a paint analysis and the relevance		
Can write appropriate conclusions		
Has read the reading assignments		
2. Evaluation		
Given two (2) mock cases, analyze the items of evidence and prepare reports based upon the analysis.		
Review and discuss readings and exercises		

Module 12: Final Evaluation and Preparation for Court

	Date Completed	Initials
1. The trainee's progress will be monitored:		
Has prepared qualifying questions		
Has read the reading assignments		
2. Evaluation		
Successfully complete moot court / roundtable discussion		
Pass a written test		