FEDERAL RAILROAD ADMINISTRATION OFFICE OF SAFETY



FY 2012 Technical Training Course Catalog and Calendar SAFETY IMPROVEMENT & DEVELOPMENT DIVISION

Revised January 3, 2012

Foreword

The SIDD course catalog is provided as a service to our internal Office of Safety stakeholders, including participating state inspectors and program managers. The catalog includes course descriptions for 21 different courses SIDD will deliver this year. The catalog is preceded by the FY 2012 Training Calendar as of October 20, 2011, which consists of 53 classes in the 21 courses.

If calendar changes occur, updates will be reflected in this document, which will be posted at the following FRA SharePoint site: https://one.dot.gov/fra/rrs/SIDT%20Course%20Catalog/Forms/AllItems.aspx, and at http://www.fra.dot.gov/rrs/pages/fp_1301.shtml for our state partners and external stakeholders.

- 1. Technical training is based on organizational needs, and therefore considered mandatory. SIDD performs various types of analyses to assess the organizational needs, including feedback from Headquarters, the regions, and the inspectors.
- 2. The training is for internal Office of Railroad Safety stakeholders. Although we may invite people from the NTSB, Transport Canada, etc., to attend on occasion, we do not provide training for external stakeholders from other governmental or civilian organizations. We simply do not have the resources to do so.
- 3. Normally, we do not honor requests to attend particular courses or classes. We use a specific methodology to select Federal and State Inspectors and Specialists in a resource responsible and equitable manner. The SIDD Management Analyst manages the selection process.
- 4. The GovTrip program will be used to arrange travel funded by SIDD for participating state inspectors and managers. State employees will not have access to the GovTrip program; their travel arrangements will be prepared by FRA Regional Travel Planners and approved by a senior regional manager. FRA will not fund travel for State Program Managers who wish to attend training courses unless they also actively perform inspections. They may attend courses, but must travel at state expense.
- 5. Staff Directors, Regional Administrators, Deputy Regional Administrators, and State Program Managers are invited to attend in-house classes if they wish, provided Barbara Hall is notified at least one month prior to the class.
- 6. When we schedule contractor training, we cannot take the groups mentioned above into account. If someone from this group wishes to attend a contractor course, they must receive prior approval from the SIDD Staff Director. We cannot use slots allotted for Inspectors and Specialists to accommodate people from this group.
- 7. Current policy is to schedule Chief Inspectors only for courses that relate to their previous discipline of expertise, general courses, or for courses developed specifically for them. However, if Chief Inspectors need to attend courses outside their area of expertise, the Regional Administrator must make the request to the SIDD Staff Director.
- 8. GS-05 and GS-07 level inspector trainees do **not** attend formal training classes developed for journey level inspectors. We have a specific program of training for trainees at these grade levels. The program consists primarily of self-study and one-on-one tutelage with experienced inspectors. The same standard generally applies to participating state inspector trainees. GS-09 level trainees and state equivalent inspectors are scheduled for journey level classroom and on-the-job training.

	FY 2012 Technical Training Calendar Revised Date: 01/03/2012 HQ Orientation Fundamentals Classes March 19-23, August 20-24					
Class ID	Course ID	Course Name	Arrive	Depart	City	State
	OP 207A	OP Fundamentals - Phase Two	12/05/11	_	Redondo Beach	CA
1202	OP 213	OP Fundamentals - Phase Three	01/09/12	01/13/12	San Antonio	TX
1203	OP 220	OP Recurrency 2012	01/30/12	02/03/12	San Antonio	TX
1204	HM 201	HM Fundamentals - Phase One	02/27/12	03/02/12	San Antonio	TX
1205	OP 220	OP Recurrency 2012	02/27/12	03/02/12	Redondo Beach	CA
1206	Track 213	Track Recurrency 2012	03/05/12	03/09/12	San Antonio	TX
1207	S&TC 201	S&TC Fundamentals - Phase One	03/12/12	03/16/12	Louisville	KY
1208	OP 220	OP Recurrency 2012	03/19/12	03/23/12	Nashville	TN
1209	HM 208	HM Fundamentals - Phase Two	03/26/12	03/30/12	San Antonio	TX
1210	S&TC 219	S&TC Recurrency 2012	03/26/12		San Antonio	TX
1211	Track 213	Track Recurrency 2012			Redondo Beach	CA
	MP&E 201	MP&E Fundamentals - Phase One			San Antonio	TX
	HM 219	HM Recurrency 2012			Redondo Beach	CA
	OP 220	OP Recurrency 2012		04/13/12		OH
	S&TC 206	S&TC Fundamentals - Phase Two		04/13/12		TN
	Track 213	Track Recurrency 2012		04/13/12		OR
	GN 207	Accident Investigation Fundamentals		04/20/12		KY
	MP&E 205	MP&E Fundamentals - Phase Two			San Antonio	TX
	OP 220	OP Recurrency 2012		04/27/12		KY
	GN 302A	Railroad Noise Control		04/27/12		TX
	S&TC 219	S&TC Recurrency 2012		04/27/12		OH
	Track 213	Track Recurrency 2012		04/27/12		TN
	MP&E 213	MP&E Recurrency 2012			Redondo Beach	CA
	OP 220	OP Recurrency 2012	05/07/12			OR
	S&TC 219	S&TC Recurrency 2012	05/07/12		San Antonio	TX
	Track 213	Track Recurrency 2012	05/07/12		Columbus	OH
	HM 219	HM Recurrency 2012 Investigative Skills Fundamentals	05/14/12 05/21/12	05/18/12	Louisville	TN KY
	GN 202 MP&E 213	č				OR
	OP 220	MP&E Recurrency 2012 OP Recurrency 2012	05/21/12 05/21/12		Des Moines	IA
	Track 213	Track Recurrency 2012	05/21/12		Des Moines	TN
	Track 201	Track Fundamentals - Phase One		06/08/12		KY
	HM 219	HM Recurrency 2012			San Antonio	TX
	MP&E 213	MP&E Recurrency 2012	06/04/12		Des Moines	IA
	OP 220	OP Recurrency 2012	06/11/12		Redondo Beach	CA
	S&TC 219	S&TC Recurrency 2012	06/11/12		Louisville	KY
	MP&E 213	MP&E Recurrency 2012	06/11/12		Columbus	ОН
	Track 205A	Track Fundamentals - Phase Two & Three	06/24/12		Louisville	KY
	GN 305	Fall Protection for Bridges	07/09/12		Louisville	KY
	GN 208	FRA Report Writing Principles for Federal Employees	07/07/12	07/13/12	Cancelled	11.1
	HM 219	HM Recurrency 2012	07/09/12	07/13/12	Des Moines	IA
	MP&E 213	MP&E Recurrency 2012	07/09/12		Nashville Nashville	TN
	OP 402B	Alcohol/Drug Program Compliance Reviews	07/16/12		Colorado Springs	CO
	MP&E 213	MP&E Recurrency 2012	07/23/12		Louisville	KY
	S&TC 219	S&TC Recurrency 2012	07/23/12		Redondo Beach	CA
	GN 305	Fall Protection for Bridges	07/30/12		Louisville	KY
	GN 208	FRA Report Writing Principles for Federal Employees			Cancelled	
	MP&E 213	MP&E Recurrency 2012	08/06/12	08/10/12	San Antonio	TX
	Track 213	Track Recurrency 2012	08/06/12		Louisville	KY
	HM 219	HM Recurrency 2012	08/13/12		Columbus	ОН
	GN 202	Investigative Skills Fundamentals	08/20/12		Louisville	KY
	MP&E 213	MP&E Recurrency 2012	08/20/12		San Antonio	TX
	Track 213	Track Recurrency 2012	08/20/12		Columbus	ОН

Course_ID Hours Prerequisite Source

GN 202 24 None Contractor and FRA

Course Name

Investigative Skills Fundamentals

Description and Objectives

Description: This course is for those who are expected to perform an FRA investigation. The course focuses on developing interviewing, photography, and note taking skills; and includes interactive lectures and a field trip. Practical exercises are built around a grade crossing accident scenario.

- 1. Use a digital camera to photograph an accident scene.
- 2. Understand the importance of field notes during an investigation.
- 3. Conduct an interview.
- 4. Compute a FHWA sight distance triangle at a highway-rail grade crossing.
- 5. Comply with FRA policy regarding complaint investigations.

Course_ID Hours Prerequisite Source

GN 207 30 GN 202 Contractor and FRA

Course Name

Accident Investigation Fundamentals

Description and Objectives

Description: This course is intended for anyone who may be assigned to perform an FRA accident investigation. There are learning modules covering FRA's statutory and regulatory authority to conduct investigations, communication guidelines, fatigue and crew resource management techniques for listing and prioritizing information gathering objectives, note taking and interviewing skills reinforcement, alcohol & drug involvement, locomotive event recorders, hazardous materials involvement, and FRA accident reporting requirements.

The course consists of a series of short interactive lectures using slide presentations and participant guides, followed by practical exercises for each of the modules. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a 25 question pre and post-test designed to evaluate participant knowledge levels at the beginning and ending of the course.

- 1. Recognize their statutory and regulatory authority to investigate accidents.
- 2. Analyze accident reports submitted by railroads to FRA.
- 3. Explain circumstances where fatigue may be a causal factor.
- 4. Understand the Threat and Error Management Model.
- 5. Use recognized investigative techniques to list and prioritize objectives.
- 6. Identify note taking and interview requirements, policies, and techniques.
- 7. Recognize when locomotive event recorder data, alcohol and drug involvement, and hazardous materials involvement must be included in reports.
- 8. Recall FRA accident investigation policy as specified in Chapter 4 of the General Manual.

Course_ID Hours Prerequisite Source

GN 208 22 None Contractor and FRA

Course Name

FRA Report Writing Principles for Federal Employees

Description and Objectives

Description: This three-day course is intended for Federal Office of Safety Field Employees who are required to write and edit reports. The first day is a grammar refresher workshop. The second day includes modules on editing, general writing principles, and planning and organizing FRA reports. Students practice writing and editing sections of an accident report on the third and final day.

- 1. Use grammar rules more effectively.
- 2. Write sentences and paragraphs following the principles of clear and concise government writing.
- 3. Apply editing techniques to their own writing.
- 4. Plan and organize FRA reports.
- 5. Write reports that will be clear to the reader at the first reading.

Course_IDHoursPrerequisiteSourceGN 302A28NoneFRA

Course Name

Railroad Noise Control

Description and Objectives

Description: This course is intended for Federal Inspectors from the MP&E, OP, and Track Disciplines who may be assigned to perform Railroad Noise Emission Tests and noise complaint investigations. This course will provide inspectors with the knowledge, skills, and abilities necessary to perform all railroad noise emission tests to determine compliance with Federal Noise Emission Compliance Regulations.

Participants will receive classroom lecture in conjunction with a slide presentation and participant guide. This course is designed to engage and stimulate the participant by a series of field exercises. Each participant will be required to perform a variety of actual railroad noise emission tests to determine compliance with Federal Regulations. Field exercises will be performed at both receiving property and railroad property.

- 1. Apply Federal Noise Emission Compliance Regulations when conducting railroad noise emission tests.
- 2. Identify deviations from the standards.
- 3. Differentiate between regulated and non-regulated railroad noise sources.
- 4. Explain what a "Valid Measurement" is in the context of car coupling or retarder railroad noise emission tests.
- 5. Calculate Adjusted Average A-Weighted sound levels subsequent to a car coupling and/or retarder noise test.
- 6. Perform a locomotive and/or railroad car pass-by noise test.
- 7. Perform an idling locomotive noise test.
- 8. Recognize correct locomotive audible warning device noise tests and associated documentation procedures.

Course_IDHoursPrerequisiteSourceGN 30520NoneFRA

Course Name

Fall Protection for Bridges

Description and Objectives

Description: The purpose of this training is to provide Track and S&TC Inspectors with the fundamental knowledge and skills to be able to properly apply fall protection requirements to protect roadway workers while they are working on bridges. Participants must demonstrate proper use of agency-provided fall protection equipment in connection with railroad-installed fall protection systems.

Training scenarios require participants to demonstrate proficiency by accessing track bridges and/or signal devices for the purpose of inspections to evaluate compliance with the Railroad Workplace Safety regulations.

- 1. Demonstrate competency in the use of fall protection equipment provided by FRA and that used by railroads.
- 2. Apply in various scenarios, railroad-provided fall protection systems, including proper
- 3. application and use of fall rescue systems.
- 4. Apply FRA Railroad Workplace Safety regulations.
- 5. Demonstrate railroad Bridge Worker Safety practices that contribute to improvements in safety for railroad Track and S&TC personnel working at heights along the right-of-way.

Course_IDHoursPrerequisiteSourceHM 20124NoneFRA

Course Name

Hazardous Materials Fundamentals - Phase One

Description and Objectives

Description: This course provides recently hired journey level Federal and State Hazardous Materials Inspectors, and GS-9 level HM Trainees with the knowledge, skills and abilities necessary to perform inspections at their grade level. The course is an overview of the following: 49 CFR Parts 171, 172, 173, 174, 178, 179 and 180, Hazmat Compliance Manual, FRA Field Orientation and Training Guide, AAR Specification for Tank Cars- M1002.

This course consists of a series of short interactive lectures using a slide presentation and participant guides, followed by practical team exercises for each learning module. Practice exercises will consist of situational scenarios and group discussions. There is a multiple choice pre and post-test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. Apply appropriate FRA hazmat regulations when performing site inspections.
- 2. Recognize fundamental exclusions from the regulations.
- 3. Prepare an F6180.96 inspection report based on a given scenario.
- 4. Identify the railroad and/or shipper's responsibilities for achieving compliance.
- 5. Recognize the role of DOT Special Permit & FRA One-Time Movement Approval authorizations.
- 6. Explain inspector discretion with respect to reporting non-compliance with Federal and International regulations.
- 7. Name the appropriate reference source documents for guidance.

Course_IDHoursPrerequisiteSourceHM 20824NoneFRA

Course Name

Hazardous Materials Fundamentals - Phase Two

Description and Objectives

Description: This course provides recently hired journey level Federal and State Hazardous Materials Inspectors, and GS-9 level HM Trainees with the knowledge, skills and abilities necessary to perform inspections at their grade level. The course is a continuation of HM-201 (Phase 1), and is an overview of the following: 1) The requirements for using civil penalties as a compliance tool, 2) Gathering applicable documents to support the claim, and the steps necessary to properly prepare the report, 3) An explanation of tank car fundamentals (Parts 179 & 180), 4) Shipping of hazmat via intermodal, and 5) An overview of the Hazmat Compliance Manual, FRA Field Orientation and Training Guide, AAR Specification for Tank Cars-M1002, 49 CFR Parts 171, 172, 173, 174, 178, 179 and 180.

This course consists of a series of short interactive lectures using a slide presentation and participant guides, followed by practical team exercises for each learning module. Practice exercises will consist of situational scenarios and group discussions. There is a multiple choice pre and-post test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. List the enforcement actions available to effectively handle non-compliant hazmat issues.
- 2. Gather the documents needed to support the violation report.
- 3. Determine if individual civil penalty actions (IL) are appropriate.
- 4. Prepare an F6180.110 violation report.
- 5. Comprehend the fundamentals of tank car types & specifications.
- 6. Identify the role of international standards in the shipment of intermodal packages.

Course_IDHoursPrerequisiteSourceHM 21924NoneFRA

Course Name

HM Recurrency 2012

Description and Objectives

Description: This course is intended for all Hazmat Inspectors and Specialists. The course is an overview of various hazmat activities of inspection, analysis, evaluation, and consists of separate learning modules of the following: FRA site inspection, Electronic Data Interchange (EDI) billing process, documentation associated with violation reporting, application of Federal and International regulations. The course will include explanation of newly introduced hazmat regulations affecting rail transportation.

- 1. Analyze EDI billing processes.
- 2. Identify documents required to support violation and incident reports based on given case studies.
- 3. Match applicable Federal and International regulations based on given scenarios.
- 4. Understand the purpose of the Inspector Competency Model.

Course_IDHoursPrerequisiteSourceMP&E 20132NoneFRA

Course Name

MP&E Fundamentals - Phase One

Description and Objectives

Description: This course provides recently hired journey level MP&E Inspectors, and GS-9 level MP&E Trainees with the knowledge, skills and abilities necessary to perform inspections at their grade level. The course includes instruction on the MP&E Compliance Manual, Code of Federal Regulations (49 CFR), and the Single Car Air Brake Test (SCT) Manual. New inspectors learn the specific methodologies related to Locomotive (229), Safety Appliances (231), Power Brakes and Drawbar Heights (232), Freight Car Safety Standards (215), Locomotive and Car Glazing Standards (223), Blue Signals (218), Rear of Train Markers (221), Reflectorization of Rail Freight Rolling Stock (224).

- 1. Recognize appropriate MP&E regulations when performing site inspections.
- 2. Identify deviations from the regulations.
- 3. Prepare an F6180.96 inspection report based on a given scenarios.
- 4. Understand railroad employees' compliance responsibilities.
- 5. Match specific definitions associated with Blue Signal Protection of Workers as covered in 49 CFR Part 218.

Course_IDHoursPrerequisiteSourceMP&E 20532NoneFRA

Course Name

MP&E Fundamentals - Phase Two

Description and Objectives

Description: This course is intended for all newly hired MP&E Specialists, Federal/State journey level Inspectors, and GS-9 MP&E Trainees. This course is an overview of various MP&E activities in connection with inspection reports, violation reports, special notice for repair reports, activity codes, defect/non-defect codes, waiver investigation. This course will also provide participants with a thorough overview of the MP&E Compliance Manual, MP&E Technical Bulletins and General Manual. The course consists of a series of short interactive lectures, using a slide presentation, participant guides, and job aids, followed by practical individual and team exercises for each learning module.

- 1. Prepare a MP&E Violation Report (F6180.109), based on a given scenario.
- 2. Prepare a Special Notice for Repair Report (F6180.8), based on a given scenario.
- 3. Recall appropriate MP&E activity codes.
- 4. Use MP&E Compliance Manual and discuss regulatory interpretations.
- 5. Select appropriate MP&E Technical Bulletins and discuss regulatory requirements.
- 6. Prepare a F6180.80 with recommendation for regional level warning based on a given scenario.
- 7. Prepare a waiver petition report based on a given scenario.

Course_IDHoursPrerequisiteSourceMP&E 21324NoneFRA

Course Name

MP&E Recurrency 2012

Description and Objectives

Description: This course is intended for all MP&E Inspectors and Specialists. The course consists of a walk-though review of the new MP&E Compliance Manual, a discussion of the Inspector Competency Model, and a review of FRA Violation protocols and guidelines contained in the General Manual. There are a series of short interactive lectures using a slide presentation, participant guides, and job aids; followed by practical group and individual exercises which specifically address the course topics.

- 1. Break down the material in the new MP&E Compliance Manual.
- 2. Apply techniques to improve violation report writing.
- 3. Be aware of guidelines and requirements associated with the development of violations found in the General Manual.
- 4. Understand the purpose of the Inspector Competency Model.

Course_IDHoursPrerequisiteSourceOP 207A24NoneFRA

Course Name

OP Fundamentals - Phase Two

Description and Objectives

Description: This course is intended for all Operating Practices Inspectors. There are eleven learning modules covering waiver petitions, enforcement actions against railroads, inspection reports, complaint investigation, individual liability, violation reports, CFR Part 240, RCL, and CFR Part 232 as it pertains to Operating Practices Inspectors. The course consists of a series of lectures using a Power Point slide presentation and participant guides, followed by practical exercises for each of the modules. The participants will be walked through a mock complaint investigation, interview, violation report, and regional warning letter. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a multiple choice, pre and post-test that is designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. Understand the waiver process.
- 2. Prepare an inspection report based on a given practical exercise.
- 3. Follow FRA complaint investigation policy.
- 4. List the enforcement actions available against railroads.
- 5. Prepare violation reports.
- 6. Identify the types of individual liability options.
- 7. Perform various types of interviews.
- 8. Ensure compliance with CFR Part 232.
- 9. Determine a railroad's compliance with CFR Part 240.

Course_IDHoursPrerequisiteSourceOP 21324NoneFRA

Course Name

OP Fundamentals - Phase Three

Description and Objectives

Description: This course is intended for all Operating Practices Inspectors. There are nine learning modules covering the Focused Inspection Process and the FRA Inspector Competency Model. The course will provide an overview of 49 CFR Part 217 (Railroad Operating Rules), with special emphasis on 217.9 (Program of operational tests and inspections). It will include field monitoring of operational testing by railroad managers, charting and analysis of data, and presenting their findings to the railroad managers.

- 1. Accept the goals of the Focused Inspection Process (FIP).
- 2. Collect and review Part 225 records.
- 3. Apply FRA inspector's requirements regarding an operational testing session.
- 4. Determine the scope of operational testing data.
- 5. Chart data as required in the FIP.
- 6. Apply the FIP within assigned inspection district and indentify root causes.
- 7. Present FIP findings to a mock railroad manager during a role play exercise.
- 8. Recognize the Inspector Competency Model (ICM) usefulness in connection with the FIP.

Course_IDHoursPrerequisiteSourceOP 22024NoneFRA

Course Name

OP Recurrency 2012

Description and Objectives

Description: This course is intended for all Operating Practices Inspectors and Specialists. There are four learning modules covering improving violations, OP Compliance Manual, the Inspector Competency Model (ICM), and the charting requirements found in the Focused Inspector Process (FIP). Inspectors will bring into the classroom, their own charting of Part 225 Accountable Reports and operational testing data from their respective territory. After analyzing the data, inspectors will be asked to present their findings of the issues identified in their territory.

- 1. Break down the material in the new OP Compliance Manual.
- 2. Apply techniques to improve violation report writing.
- 3. Chart the Focused Inspection Process.
- 4. Understand the purpose of the Inspector Competency Model (ICM).

Course_IDHoursPrerequisiteSourceOP 402B24NoneFRA

Course Name

Alcohol/Drug Program Compliance Reviews

Description and Objectives

Description: This course is intended for designated Federal Chief Inspectors (Team Leaders), and Assistant Team Leaders assigned to Part 219 oversight and compliance. There are five learning modules covering the objectives listed below. The course consists of a series of short interactive lectures using PowerPoint slide presentations and participant guides including individual and team exercises in a classroom setting. The participants will review the standard inspection procedures for Part 219 compliance reviews, discuss best practices, recognize discrepancies in the records and become familiar with the proposed Part 219 rule changes.

- 1. Demonstrate the responsibilities of a Part 219 Team Leader and Assistant Team Leader.
- 2. Appraise sample alcohol/drug testing records to identify discrepancies in each of the major program element.
- 3. Identify the major proposed changes to Part 219 and any upcoming changes to Part 40.
- 4. Recognize repetitive compliance issues and formulate a plan to resolve.

Course_IDHoursPrerequisiteSourceS&TC 20124NoneFRA

Course Name

S&TC Fundamentals - Phase One

Description and Objectives

Description: This course is intended for all recently hired S&TC inspectors who may be assigned to perform FRA inspections, complaint investigations, and other general duties associated with an FRA S&TC Inspector's position.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides followed by practical team exercises. The participants, using practical exercises, prepare inspection reports, list inspection priorities, practice how they would approach certain inspections and investigations of signal systems, and learn signal system terminology and definitions. A building block concept is used for the practical exercises and learning lessons are reinforced throughout the course. There are multiple choice, pre and post-tests designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. List the proper sequence of events involved in performing a signal system inspection.
- 2. List the various inspection and enforcement tools available while inspecting railroads.
- 3. Write a brief memorandum report regarding defective conditions of signal systems.
- 4. List the correct use of industry standard terminology and FRA definitions.
- 5. Identify various signal systems, including associated operating rules and methods of operation utilized in the railroad industry.
- 6. Identify various highway grade crossing signal system components, including the review of special grade crossing operating rules and railroad special instructions.
- 7. List the proper regulation to be used when citing defective railroad S&TC conditions.
- 8. Recognize appropriate inspection procedures and how to establish good rapport with industry stakeholders.

Course_IDHoursPrerequisiteSourceS&TC 20624NoneFRA

Course Name

S&TC Fundamentals - Phase Two

Description and Objectives

Description: This course is intended for all S&TC Inspectors, Specialists, and Chief Inspectors with an S&TC background, who may be assigned to perform an FRA inspection, complaint investigation, block signal application or waiver investigation, false proceed signal investigation, violation report, or individual liability action. There are learning modules covering the objectives listed below.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides, followed by practical team exercises. Using practical exercises, the participants will prepare a complaint investigation memo, an inspection report, a violation report, a signal application report, and a regional warning letter. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a pre and post-tests designed to evaluate participant knowledge levels at the beginning and ending of the course.

- 1. Investigate block signal applications, RS&I waiver applications, false proceed signal failures, and highway-rail grade crossing activation failures.
- 2. List the enforcement actions available against railroads.
- 3. Explain the proper procedures for handling complaints from start to finish.
- 4. Write a complaint report based on the given scenario.
- 5. Write a signal inspection report using FRA's computer-based RISPC system.
- 6. Write a violation report using a Form FRA F6180.112 violation report.
- 7. Explain if individual civil penalty actions are necessary because the conduct is willful.
- 8. Write a regional individual liability warning letter.

Course_IDHoursPrerequisiteSourceS&TC 21924NoneFRA

Course Name

S&TC Recurrency 2012

Description and Objectives

Description: This course is intended for all S&TC Inspectors who may be assigned to perform Part 234 and 236 inspections, investigations and other duties associated with railroad and highway grade crossing signal systems.

The course consists of a series of short interactive lectures using PowerPoint presentations and participant guides, followed by practical exercises. The participants will recognize how to choose the correct rule number regarding S&TC inspections, review Technical Bulletin S-09-03 regarding electronic recordkeeping, Part 236 movable bridge inspections, writing technically correct S&TC violations, and using the Inspector Competency Model. A building block concept is used for the practical exercises and learning lessons are reinforced throughout the course. There are multiple choice, pre and post-tests designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. Recognize the correct activity code and rule number for each applicable system.
- 2. Review moveable bridge inspection procedures.
- 3. Apply FRA policy regarding inspections of electronic recordkeeping systems, TB S-09-03.
- 4. Apply FRA Headquarters instructions for developing and writing S&TC violations.
- 5. Understand the purpose of the Inspector Competency Model.

Course_IDHoursPrerequisiteSourceTrack 20132NoneFRA

Course Name

Track Fundamentals - Phase One

Description and Objectives

Course Description: This course introduces new Track Inspectors to 49 CFR Part 213 Subpart A-F Track Safety Standards, general railroad industry safety requirements, and personal safety requirements, when inspectors are on or about the railroads' tracks or property. The course combines classroom learning examples with practical field exercises to gain hands-on experience about the rail industry.

- 1. Use personal safety equipment when conducting a track inspection.
- 2. Relate commonly used track terms to actual components in the track structure.
- 3. Interpret a typical railroad timetable, track chart/profile.
- 4. Use the inspection tools that are necessary to conduct a track inspection.
- 5. Interpret and analyze data generated by the Automated Track Inspection Program.
- 6. Clarify the minimum requirements for each subpart of 49 CFR Part 213.
- 7. Apply the Track Safety Standards and the Track Compliance Manual guidelines during inspections.

Course_IDHoursPrerequisiteSourceTrack 205A36NoneFRA

Course Name

Track Fundamentals - Phase Two & Three

Description and Objectives

Description: This course is intended for all new Track Inspectors and Specialists. In the Phase Two section of this course, there are six learning modules covering waiver petitions, enforcement actions against railroads, complaint investigations, inspection reports, individual liability, and violation reports.

The Phase Three section of the course introduces the participants to rail flaw detection identification and the ultrasonic technology concepts that support identification of rail defects. A review of the defect table in 213.113 Defective rails, in the Track Compliance Manual, will allow the participants to analyze the current rule for inconsistencies in the remedial action table.

The course consists of a series of short interactive lectures using PowerPoint presentations and the participant guide. A building block concept is used for the practical exercises so that the learning lessons are reinforced throughout the course. There is a pre and post-test designed to evaluate participant knowledge levels at the beginning and end of the course.

- 1. List the three categories of waiver investigations.
- 2. List the enforcement actions available against railroads.
- 3. Write a narrative complaint investigative report.
- 4. Complete a track inspection report.
- 5. Write a violation report using Form FRA F6180.111 violation report.
- 6. Determine if individual civil penalty actions are advisable for willful conduct.
- 7. Prepare a regional warning letter for individual liability.
- 8. Accept the basic principles and theories of ultrasonics and how they are applied in the rail flaw detection process.
- 9. Accept information on the equipment, type of technology currently utilized, and emerging technologies and their potential capabilities.
- 10. Be aware of the history of the rail manufacturing process and rail flaw development.
- 11. Recognize how test data is used to properly determine a rail failure location within the test data.

Course_IDHoursPrerequisiteSourceTrack 21324NoneFRA

Course Name

Track Recurrency 2012

Description and Objectives

Description: The Federal Railroad Administration's Railroad Workplace Safety Standards - Fundamentals course is an in depth overview of the Roadway Worker Protection and Roadway Maintenance Machine and Hi-Rail Vehicles rules, 49 CFR Part 214, Subparts C and D. Slides reviewing 220.11 Railroad Radio Communications with respect to Roadway Workers are included.

This course consists of PowerPoint presentations and team scenarios that require the participants to associate mind mapping techniques to discriminate uniform understanding, interpretation, application, and enforcement policies using the provided scenarios to determine the correct application of the rules. Included in this course is a study of the newly promulgated concrete ties requirements, and a review of the Track Activity Codes and Inspector Competency Model from previous year's training.

- 1. Understand the purpose of the Inspector Competency Model.
- 2. Accept newly promulgated guidance for concrete ties.
- 3. Determine the "Purpose and Scope" of 49 CFR Part 214, Subpart C.
- 4. State the "Responsibilities" of employers and individual roadway workers.
- 5. Identify "Working Limits" generally.
- 6. Identify "On-Track Safety Procedures" for roadway work groups and lone workers.
- 7. Apply the requirements for training, qualification, and general procedures for all roadway maintenance machines.
- 8. Apply the rule to determine the minimum training and qualifications required for all roadway workers, generally.
- 9. Discriminate the intent and practical application of current roadway worker technical bulletins.
- 10. Discriminate the minimum requirements for 49 CFR Part 214, Subpart D.
- 11. Discriminate the intent and practical application of the Track Division Railroad Workplace Safety Compliance Manual.