CN: PCC FIELD TESTING PROCEDURES
Code ABT
Hours: 7
Description: This course is designed to give the participant a working knowledge of the concrete testing procedures currently being used by the Washington State Department of Transportation. Visual aids, demonstrations, and hands-on practice will be used throughout the course. safety and care of equipment will be stressed.
Objectives: Upon completion of this course participants will be able to: (1) Perform the following field tests: slump, air content, temperature, and cement factor;
2) Fabricate and handle concrete test cylinders;
(3) Prepare necessary test documentation.
Attendees: TT 1 through TE 3

CN: AGGREGATE PRODUCTION INSPECTION
Code: ACA
Hours: 4
Description: This course covers inspection procedures for production of crushed and screened materials.
Objectives: On completion of this course participants will be able to:
1. Apply standard testing procedures to aggregate production
2. Understand proper procedures for handling and placement of aggregates at a storage site.
3. Conduct all required gradation tests on aggregates.
4. Identify improper methods of crushing, screening or placement at a production site.
Attendees: TT 1 through TE 3

CN: ASPHALT PAVING INSPECTION
Code: ACB
Hours: 8
Description: This course will cover asphalt street inspection. Included topics are pre-leveling, asphalt placement, compaction, testing, pavement repairs, communications and documentation.
Objectives: On completion of this course participants will be able to:
1. Implement proper asphalt paving inspection techniques.
2. Complete required documentation.
3. Recognize the importance of communications.
4. Demonstrate an understanding of safety requirements.
Attendees: TT 1 through TE 3

CN: BITUMINOUS SURFACE TREATMENT INSPECTION

Code: ACC
Hours: 4
Description: This course covers roadway preparation, placement of asphalt and aggregates, equipment uses, project control and traffic control for BST jobs.
Objectives: On completion of this course participants will be able to:
1. Understand BST operations. 2. Obtain necessary material samples. 3. Complete required documentation. 4. Understand communications needs. 5. Implement proper traffic control.
6. Understand specific safety requirements.
Attendees: TT 1 through TE 3.

CN: DRAINAGE INSPECTION

Code: ACF
Hours: 6
Description: This course covers basic inspection and testing procedures for drainage installation.
Objectives: On completion of this course participants will be able to:

1. Understand proper techniques for drainage installation
2. Perform and interpret required tests.
3. Complete required documentation.
4. Understand related safety requirements.

Attendees: TT 1 through TE 3

CN: BRIDGE STRUCTURES INSPECTION

Code: ACM
Hours: 24
Description: This course covers inspection of Bridge Structure construction. Included will be identification of structural components, critical phases, testing and documentation procedures.
Objectives: On completion of this course participants will be able to:
1. Identify structural elements of bridges.
2. Solve field problems dealing with structure construction
3. Understand bridge construction sequencing for different types of structures. 4. Interpret bridge construction plans as needed to accomplish inspection duties.
5. Check field dimensions. 6. Understand communication lines documentation necessities and safety requirements.
Attendees: TT 1 through TE 3

CN: MISCELLANEOUS DOCUMENTATION

Code: ACY
Hours: 7
Description: This course covers documentation for pre-contract, contract, and post-contract needs. DOT and Contractor documentation is discussed.
Objectives: On completion of this course participants will be able to:
1. Prepare construction documentation as required.
2. Interpret and apply required documents to their work operations. 3. Produce required documentation in a complete and accurate form. 4. Locate and interpret stored documentation to accomplish their immediate needs.
Attendees: TT 1 through TE 3

CN: EXCAVATION & EMBANKMENTS INSPECTION

Code: AC3
Hours: 8
Description: This course covers the proper procedures for inspection of a grading project including clearing and grubbing, earthwork, rock embankment, compaction, etc.
Objectives: On completion of this course participants will be able to:
1. Interpret the grading plans.
2. Understand staking procedures. 3. Understand compaction procedures. 4. Recognize proper grading methods.
5. Utilize communication lines and field documentation procedures.
Attendees: TT 1 through TE 3

CN: EXCAVATION & EMBANKMENTS INSPECTION

Code: AC3
Hours: 8
Description: This course covers the proper procedures for inspection of a grading project including clearing and grubbing, earthwork, rock embankment, compaction, etc.
Objectives: On completion of this course participants will be able to:
1. Interpret the grading plans.
2. Understand staking procedures. 3. Understand compaction procedures. 4. Recognize proper grading methods.
5. Utilize communication lines and field documentation procedures.
Attendees: TT 1 through TE 3

CN: NUCLEAR GAUGE, SAFETY & OPERATION

Code: ALG
Hours: 7
Description: This course is designed to give the participants a working knowledge of the Troxler 3411B and 43430 Nuclear Densometers
Passing grades on both a written test and a hands on proficiency test are required before individuals will be authorized to use the gauges. Job site safety and care of equipment will be stressed.
Objectives: On completion of this course participants will be able to:
1. Understand the fundamentals of Radiation Theory.
2. Understand Health Safety concerning radiation.
3. Understand Radiation Shielding.
4. Operate the 3411B and 3430 Nuclear gauges.
Attendees: TE - TE3 (Gauge Operators)

CN: NUCLEAR GAUGE, OVERVIEW FOR SUPERVISORS

Code: ANE
Hours: 4
Description: This 4-hour abbreviated presentation will enable the participant to effectively supervise subordinates in the proper storage, transportation, use and application of the Nuclear Moisture/Density Gauge. The course will present basic radiation theory, safety, WAC's/WSDOT policy, embankment and and paving density control procedures.
Objectives: On completion of this course, participants will be able to:
1. Understand the basic operating principles of the nuclear gauge. 2. Understand storage, handling and accountability gauges. 3. Realize and practice the safety guidelines as established by DSHS.
4. Establish among subordinates the proper procedures for reporting embankment and paving compaction control.
Attendees: Supervisory persons, Transportation Engineer 2 and above who supervise or review Nuclear Density Gauge results.

CN: NUCLEAR GAUGE,EMBANKMENT/SURFACING/PAVEMENT APPLICATIONS

Code: ANQ
Hours: 4
Description: This course is designed to give the participants the skills they need to conduct density testing on Earthwork and crushed surfacing materials using the Troxler 3411B and 3430 moisture density gauge. Job site safety and care of

equipment will be stressed.
Objectives: On completion of this course participants will be able to:
1. Select and use the proper density standard.
2. Correct results for oversize and moisture.
3. Conduct proper drying procedures.
4. Perform density tests with acceptable accuracy.
Attendees: TT 1 through TE 1

CN: PCC PAVEMENT PRODUCTION AND PLACEMENT
Code: APG
Hours: 6
Description: This course is designed to provide participants with the skills to perform all the required inspection duties on a PCC paving project.
Objectives: Upon completion of this course, participants will be able to: (1) Perform inspection duties on a batch plant prior to and during mixing operations; (2) Inspect the placement of PCC paving concrete; (3) Identify and understand the importance of PCC paving equipment; (4) Conduct the proper tests. of the various project types. (5). Understand the relationships of the Project Development and Program Development/Budget philosophies.
Attendees: Transportation Technicians 1 through Transportation Technician5

CN: ELECTRICAL-ILLUMINATION & SIGNALS
Code: API
Hours: 12
Description: This course is designed to familiarize the participant with procedures for constructing highway lighting and signal systems. The participant will become acquainted with new types of materials and equipment. This course will introduce the participant to the fundamentals of electricity. National, state and local safety standards will be explained.
Objectives: On completion of this course, participants will be able to:
1. Understand the illumination and signal system functions.
2. Read and interpret illumination and signal plans.
3. Investigate lighting and signal foundation locations.
4. Conduct inspection and sampling of conduits wire and other materials.
5. Detect unworkmanlike procedures.
6. Conceptualize the total function and purpose of the

illumination and signal system.
Attendees: TT-2 through TE-4.

CN: ASPHALT CONCRETE PAVEMENT TESTING
Code: BG9
Hours: 16
Description: This course is designed to develop; skills, knowledge, and ability to conduct Asphalt Concrete Testing. The Inspector involved in the testing of Contractor produced Asphalt Concrete will learn how to sample, test, and determine quality. The instruction is provided by a qualified Asphalt Concrete Testing Instructor. The course will provide hands on training with the equipment used for testing. The Instructor will explain procedures for sampling material, testing frequency requirements, rice density determination, how to operate the Nuclear Asphalt Content Gage, asphalt quick wash method, and aggregate gradation procedures. Procedures for communicating test information are discussed during the course of instruction.
Objectives: 1. Frequency of Testing.
2. Learn how to sample asphalt concrete.
3. Perform Rice density evaluation.
4. Learn Nuclear Asphalt Content Gauge operation and safety.
5. Demonstrate how to prepare samples for NG Asphalt Content Gage.
6. How to Prepare/do the Quick wash WSDOT Test Method 711.
7. Learn to determine mix gradation.
8. Understand test results and how to communicate them to supervisors.
Prerequisites:
Nuclear Gage Operator Certification Badges, Course ALG
Asphalt Plant Inspection, Course AYP
SE Certification, A09
BRING CALCULATORS AND DRESS TO TEST ASPHALT.
Attendees: Transportation Engineers 1 & 2, TE Technicians 2 & 3