Appendix A

Professional Certification Program Curriculum Work Plan

Revised January 2014

Module/Subject
Level 1/Level 2/Level 3

1. Fundamentals of Weights and Measures
   1.1. Introduction to Weights and Measures Programs
   1.2. Weights and Measures Laws and Regulations
   1.3. Field Standards and Test Equipment
   1.4. State Program Scope and Overview
   1.5. Enforcement Powers

2. Weights and Measures Administration
   2.1. Fundamentals of Weights and Measures Administration (Commercial System, Powers and Duties, etc.)
   2.2. Administration Functions (Personnel, Management, Budget, Safety, etc.)
   2.3. Legislation and Regulations (Legal Considerations, Interaction with Legislature, Stakeholders, Industry, etc.)
   2.4. Regulatory Control (Device Inspection, Commodities, Complaints)
   2.5. Laboratory Metrology Administration (Purpose of Laboratory, Responsibilities of Metrologist, NIST Expectations for Recognition of Laboratory, Quality System, Training Requirements, etc.)
   2.6. Public Relations and Communications (Publicity, Public Relations, Communications)

3. Laboratory Metrology
   3.1. NIST Fundamentals of Metrology
   3.2. NIST Mass Metrology Seminar
   3.3. NIST Volume Metrology Seminar
   3.4. NIST Length Metrology Seminar
   3.5. NIST Advanced Mass

4. Device Control Program
   4.1. Safety Considerations
   4.2. NIST Handbook 44 – Introduction to Device Control
   4.3. Weighing Systems, General
      4.3.1. Static Electronic Weighing Systems, General
      4.3.2. Static Mechanical and Hybrid Weighing Systems, General
      4.3.3. Dynamic Weighing Systems, General
      4.3.4. Precision Weighing Systems Class I and II
      4.3.5. Small Capacity Weighing Systems Class III
      4.3.6. Medium Capacity Weighing Systems Class III
      4.3.7. Large Capacity Class III and III L Weighing Systems (Vehicle and Livestock)
      4.3.8. Large Capacity Class III and III L Weighing Systems - Advanced
      4.3.9. Railroad Track Weighing Systems
      4.3.10. In-Motion Railroad Track Weighing Systems
      4.3.11. Hopper Weighing Systems
      4.3.12. Automatic Bulk Weighing Systems
      4.3.13. Automatic Weighing Systems
      4.3.14. Belt Conveyor Weighing Systems
      4.3.15. In-Motion Monorail Weighing Systems
      4.3.16. Point-of-Sale Weighing Systems
      4.3.17. Other Specialty Weighing Systems
   4.4. Dynamic Measuring Systems – General
      4.4.1. Retail Motor Fuel Dispensers
4.4.2. Loading Rack and Other Stationary Metering Systems
4.4.3. Loading Rack and Other Stationary Metering Systems – Advanced
4.4.4. Vehicle-Tank Meter Systems
4.4.5. Vehicle-Tank Meter Systems – Advanced
4.4.6. Milk Metering Systems
4.4.7. Water Meters
4.4.8. Liquefied Petroleum Gas (LPG) / Anhydrous Ammonia Liquid Metering Systems
4.4.9. LPG/Anhydrous Ammonia Liquid Metering Systems – Advanced
4.4.10. LPG Vapor Meter Systems
4.4.11. Mass Flow Metering Systems
4.4.12. Other Metering Systems (Cryogenics, Carbon Dioxide, etc.)

4.5. Static Volume Measuring Systems – General
4.5.1. Liquid Measures
4.5.2. Farm Milk Tanks
4.5.3. Dry Measures

4.6. Other Measuring Systems
4.6.1. Taximeters and Odometers
4.6.2. Wire and Cordage Measuring Systems
4.6.3. Linear Measures
4.6.4. Timing Devices
4.6.5. Weights
4.6.6. Multiple Dimension Measuring Systems

4.7. Quality Measuring Systems
4.7.1. Grain Moisture Meters
4.7.2. NIR Grain Analyzers
4.7.3. Carcass Evaluation Systems

5. Market Practices, Laws and Regulations (NIST Handbook 130) and Commodities (NIST Handbook 133)
5.2. NIST Handbook 130 – Laws and Regulations
5.2.1. NIST Handbook 130 – General Provisions
5.2.2. Packaging and Labeling Regulations
5.2.3. Method of Sale Regulations
5.2.4. Quality of Automotive Fuels and Lubricants
5.2.5. Price Verification
5.3. NIST Handbook 133 – Package Net Contents Control
5.3.1. Commodities – General
5.3.2. Packages Labeled by Weight, Standard and Random
5.3.3. Packages Labeled by Weight, Special Commodities
5.3.4. Packages Labeled by Volume (Volumetric and Gravimetric Testing)
5.3.5. Packages Labeled by Volume, Special
5.3.6. Packages Labeled by Length/Area/Thickness
5.3.7. Packages Labeled by Count
5.3.8. Other Package Types
5.4. Test Purchases
5.5. E-Commerce

Note: Initial Verification has been intentionally been left off this listing and will be addressed later.