Training Curriculum: MLRA Soil Scientist Group

Preface

The following list is a <u>recommended progression</u> of official trainings grouped within broad career advancement stages. Courses are listed within recommended career timeframes, to which there is no requirement implied, simply a guide to supervisory expectations of job duty skill acquisition with experience.

Elective courses are highly recommended, but not required within the curriculum. Nor are electives limited to those courses listed on this curriculum -- individuals are encouraged to tailor their trainings to fit their needs.

Offerings are not restricted to the level in which they occur and should not be used as a means of determining promotion eligibility.

These curricula do not in any way reflect the training necessary to fulfill the requirements for specific OPM job series, nor do they serve in any way to change the existing OPM-defined requirements for the specific job series.

MLRA SOIL SCIENTIST TRACK

Beginner

CORE COURSES
Year 1
- Basic Soil Survey – Field and Lab (NRCS-NEDC-000012)
- Conservation Planning, Part 1 (NRCS-NEDC-000019)*
- An introduction course to ArcGIS or ArcGIS Pro (ESRI Academy)
- Introduction to Field Office Technical Guide (NRCS-NEDC-000149)*
- NASIS Basic (Guides)
- NRCS Mentor and Protégé Training (NRCS-NEDC-LOCAL-000003)
- Spatial Analysis Workshop (NRCS-NEDC-000271)
- A Map Projections or Coordinate Systems course (ESRI Academy)

Year 2
- Cultural Resources Training Series, Part 1 (NRCS-NEDC-000141)
- Digital Soil Survey Data Editing (NRCS-NEDC-000250)
- Introduction to Digital Remote Sensing (NRCS-NEDC-000028)
- Introduction to Image Interpretation (NRCS-NEDC-000275)
- NASIS – Understanding Soil Interpretations (NRCS-NEDC-000279)
- Nitrogen Management and Concerns – No. 2 (NRCS-NHQ-000039)*
- Overview of water Quality Resource Assessment – No.1 (NRCS-NHQ-000038)*
- Plant ID (Local and Regional Field Botany Courses)
- Sediment Management for Water Quality – No. 4 (NRCS-NHQ-000041)*
- Statistics for Soil Survey Part 1 (NRCS-NEDC-000400)
- Water Bodies – No. 5 (NRCS-NHQ-000042)*

Year 3
- Cultural Resources Training Series, Part 2 (Offered by state)
- Introduction to Digital Soil Mapping (NRCS-NEDC-000333)
- Learning ARCGIS Spatial Analysis (ESRI Academy)
- Soil Geomorphology Institute (NRCS-NEDC-000110)

*Note: Courses indicated by asterisk can be replaced by enrollment and successful completion of Conservation Planning Bootcamp (NRCS-NEDC-000164)

SELF-STUDY AND ON THE JOB TRAINING (OJT; All recommended to be completed within the first two years of employment with NRCS)
- National Soil Survey Handbook
  - Part 600 Introduction
  - Part 601 National Cooperative Soil Survey Organization
  - Part 607 Initial Soil Survey Preparation
  - Part 608.1 Responsibilities and Organization
  - Part 614 Applying Soil Taxonomy
  - Part 618 Soil Properties and Qualities
  - Part 622 Ecological and Interpretive Groups
  - Part 627 Legend Development and Data Collection
  - Part 630 Benchmark Soils
  - Part 631 Soil Survey Investigations
  - Part 638 Soil Data Systems
  - Part 639 NASIS
  - Part 647 Soil Map Development
  - Part 649 Land Resource Regions (LRR) and Major Land Resource Areas (MLRA)
  - Part 651 Advanced Soil Survey Information
- Soil Data Access Help
- OJT Modules
  - 001-0025 Map Unit Design and Mapping Soils
  - 101-135 Soil Description
  - 201-214 Soil Classification
  - 301-310 Documentation
  - 401-419 Sampling and Characterization
  - 501-507 Soil Survey Information
  - 601-606 Equipment and Operation

RECOMMENDED ELECTIVE COURSES
  Agency Knowledge
- Basic Field Conservation Orientation (Detail in field service center for 2-3 weeks)
- Orientation for New Employees (NRCS-NEDC-000013)
  Basic Skills
- MS Excel Series (AgLearn Web-based learning)

- Technical Writing in the SPSD (Online)
  Work Life
- Emotional Intelligence 2.0 (Audio book USDA-BOOK-49926)
- What is Emotional Intelligence? (AgLearn Web-based learning)

MLRA SOIL SCIENTIST TRACK

Intermediate

CORE COURSES
Early Mid-career
- Digital Soil Mapping with ArcSIE (NRCS-NEDC-000273)
- Digital Soil Survey Data Management (NRCS-NEDC-000251)
- Ecological Site Fundamentals (New Course)
- Managing for Excellence (NRCS-NEDC-000010)
- Remote Sensing for Soil Survey Applications (NRCS-NEDC-000244)
- Soil Correlation (NRCS-NEDC-000036)
- Statistics for Soil Survey Part 2 (NRCS-NEDC-000332)

Mid-career
- How to Use DigiTop (National Agricultural Library interface)
- Science of Interpretations (NRCS-NEDC-000288)
- Wetland Identification for Food Security Act purposes – Phase 1: Basic Concepts (NRCS-NEDC-000268)
- Wetland Identification for Food Security Act purposes – Phase 2: Applications (NRCS-NEDC-000254)

SELF-STUDY AND ON THE JOB TRAINING (OJT)
- National Soil Survey Handbook
  - Part 608 Program Management
  - Part 609 Quality Control, Quality Assurance, and Soil Correlation
  - Part 610 Updating Soil Surveys
  - Part 655 Technical Soil Services
- Soil Survey Manual: Chapters 1-7 and other appropriate chapters as needed
- OJT Modules
  - 701-734 Ecological Inventory
  - 801-823 Geophysical Tools

RECOMMENDED ELECTIVE COURSES
Agency Knowledge
- Soil Health and Sustainability for Field Staff (NRCS-NEDC-000050)
- Technical Soil Services (NRCS-NEDC-000249)
Basic Skills
- Becoming an Effective Presenter (TBD)
- Conquering the Challenges of Public Speaking (AgLearn Web-based learning)
- MS Access (Web-based learning)
Leadership
- USDA Aspiring Leader Program (AgLearn Self-assigned curriculum)
Technical Skills
- Advanced Hydric Soils for Soil Scientists (NRCS-NEDC-000024)

- Discipline Specific Ecology (Range, Pasture, Forestry – depending upon SSO needs)
- Hydrology Tools for Wetland Restoration and Determination (NRCS-NEDC-000025)
- Soil Technology – Application of Soil Data Viewer and ArcGIS in Technical Soil Services (NRCS-NSSC-000001)
- Soil Technology – Measurement and Data Evaluation (NRCS-NEDC-000038)
- USACE Wetland Delineation Manual (Reg 4) for Clean Water Act (external)

   Work Life

- Emotional Intelligence: Building Self-Management Skills (AgLearn Web-based learning)
- Emotional Intelligence at Work (AgLearn Web-based learning)
- Time Management (AgLearn Web-Based books)

MLRA SOIL SCIENTIST TRACK

Advanced/Leadership

CORE COURSES
- Cultural Resources Training Series, Modules 7 & 8 (Offered by state)
- Effective Ecological Collaborations (New Course)
- Management of Soil Survey by MLRA (NRCS-NEDC-000248)
- Soil Science institute (NRCS-NEDC-000110)
- Supervising for Excellence (NRCS-NEDC-000011; for supervisors only)
- USDA Team Leader program (AgLearn Self-assigned curriculum)

RECOMMENDED SELF-STUDY
- National Ecological Site Handbook
  - Part 630 Policy and Procedures, Subparts A, B, E
  - Part 631 Ecological Site Concept and Description Development, Subpart A

RECOMMENDED ELECTIVE COURSES
 Agency Knowledge
- Capitol Hill Workshop (NRCS-NEDC-000001)
- EEO and Reasonable Accommodation for Managers & Supervisors (NRCS-NEDC-LOCAL-000002)
- USDA Federal Appropriations Law Training (AgLearn Web-based learning)
 Leadership
- Emotionally Intelligent Leadership (AgLearn Web-based learning)
- Everything You Need to Know About Leadership in 60 Seconds (AgLearn Web-based learning)
- 151 Quick Ideas for Delegating and Decision Making (AgLearn Web-based learning)
- 151 Quick Ideas to Improve Your People Skills (AgLearn Web-based learning)
- USDA Leadership Essentials Certificate Program (Self-assigned curriculum)
 Technical Skills
- NASIS – Designing and Developing Soil Interpretations (NRCS-NEDC-000302)
- Statistics for Soil Survey Part 2 (NRCS-NEDC-000332)
 Worklife
- Just Listen: Discover the Secret of Getting Through to Absolutely Anyone (AgLearn Web-based learning)
- 100 ways to Motivate Yourself (AgLearn Web-based learning)