# OJT Training Module Cover Sheet

**Title:** 101 How to use the *Field Book for Describing and Sampling Soils*

**Type:** ☑️ Knowledge  ☐ Skill  

**Performance Objective:** Trainee will be able to...
- Use the Field Book for Describing and Sampling Soils according to NCSS standards.

**Target Proficiency:**
- Awareness  ☐ Understanding  ☑️ Perform w/ Supervision  ☐ Apply Independently  ☐ Proficiency, can teach others

**Trainer Preparation:**
- Have current version of the Field Book available for use.
- Have current *Keys to Soil Taxonomy* available to reference.
- Have the NSSH available to reference.
- If hardcopy is in hand, have the "Geomorphic Description System" document prepared by the NSSC Investigations staff available to reference.

**Special Requirements:**
Initiate an external learning request with a SF-182 in Aglearn for this activity. Instructions and a template are located on the training webpages for OJT modules.

**Prerequisite Modules:**
None

**Notes:**
Consider doing this module in conjunction with the module “102 How to fill out a 232 soil description form” since the two modules are so closely related.

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**Approved by:**
Shawn McVey
The Five-Step OJT Cycle for Declarative Training (Knowledge)

Cycle Step 5
Trainer/Trainee debrief

Cycle Step 1
Trainer/Trainee establish shared mental model

Cycle Step 4
Trainer observes
Trainee perform task provided as feedback

Cycle Step 2
Trainee reviews materials provided

Cycle Step 3
Trainer and Trainee discuss information

Trainer and Trainee
# OJT Module Lesson

**Title:** 101 How to use the *Field Book for Describing and Sampling Soils*

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle step 1</td>
<td>Trainer and trainee review objective and agree that this is only a review of this publication and an introduction to how it is used in the National Cooperative Soil Survey.</td>
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<tr>
<td></td>
<td>Have trainee access hardcopy or via the internet the <em>Field Book for Describing and Sampling Soils</em> and:</td>
</tr>
<tr>
<td></td>
<td>• Read the Foreword.</td>
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<tr>
<td></td>
<td>• Thumb through and note each of the major sections:</td>
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<tr>
<td></td>
<td>1. Site Description</td>
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<tr>
<td></td>
<td>2. Profile/Pedon Description</td>
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<tr>
<td></td>
<td>3. Geomorphic Description</td>
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<tr>
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<td>4. Soil Taxonomy</td>
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<tr>
<td></td>
<td>5. Geology</td>
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<td></td>
<td>6. Location</td>
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<tr>
<td></td>
<td>7. Miscellaneous</td>
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<tr>
<td></td>
<td>8. Soil Sampling</td>
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<tr>
<td></td>
<td>• Thumb through and note each of the tabs behind each major section.</td>
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<tr>
<td></td>
<td>• Note how each section includes a brief description followed by classes, codes, and criteria as appropriate.</td>
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<td></td>
<td>• Note how sections and pages are numbered (for reference).</td>
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<td></td>
<td>• Locate the pedon description form, blank and completed example.</td>
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<tr>
<td>Cycle step 2</td>
<td>Page through each section with the trainee, pointing out what is there and answer any questions the trainee has. Discuss the following specifics. Add discussion as needed in your survey area.</td>
</tr>
<tr>
<td>1. Site Description</td>
<td>Review what is completed in your survey area (if you do not complete all items shown).</td>
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<tr>
<td></td>
<td>Note that the bedrock section has supplemental material found near the back of the Field Book, behind the Geology tab.</td>
</tr>
<tr>
<td></td>
<td>Note that Location has supplemental material near the back of the Field Book, behind the Location tab.</td>
</tr>
<tr>
<td>2. Profile/Pedon Description</td>
<td>Horizon nomenclature:</td>
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<tr>
<td></td>
<td>• Includes short description criteria. Flip back to the Soil Taxonomy tab and note:</td>
</tr>
<tr>
<td></td>
<td>o Expanded criteria descriptions.</td>
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<tr>
<td></td>
<td>o Conversion chart for prior.</td>
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</tbody>
</table>


nomenclature, which you find used in older descriptions in your survey area.
  - Note that the current *Keys to Soil Taxonomy* includes the official up-to-date nomenclature and criteria descriptions (have trainee look these up in the current Keys) and that those in the Field Book could be out of date.

Horizon Depth is currently required to be described in metric units.

**Color**
- Note the decision flowchart for describing soil color as matrix, mottle, non-redoximorphic feature, or redoximorphic feature.

**Texture**
- Note the texture triangle. Flip back to the Soil Taxonomy tab and find the associated triangle for textural family classes and the triangle combining fine-earth texture and textural family classes.

3. Geomorphic Description

Note that this is an abbreviated version of the expanded “Geomorphic Description System” maintained by the Investigations Staff at the NSSC.

Note that the official and hence most up-to-date version of this information is found in *NSSH, Part 629, “Glossary of Landform and Geologic Terms.”*

4. Soil Taxonomy

Review the contents.

5. Geology

Review the contents.

6. Location

Review the contents.

7. Miscellaneous

Note the conversion tables.

Note the common soil map symbols. Inform the trainee that the official exhibit of these is found in *NSSH, Part 627.* Print the exhibit for the trainee’s reference.

8. Soil Sampling

Review the contents.

Cycle steps 4 & 5

Answer any questions from the trainee and make sure the trainee is comfortable with the contents of
Make the trainee aware that current 232 soil description forms are in sync with the Field Book, site followed by profile, item for item. Move immediately to the module “How to fill out a 232 soil description form” (if you did not follow along during this module).
Title: 101 How to use the *Field Book for Describing and Sampling Soils*

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<tr>
<td>Quiz</td>
<td>Complete the quiz below.</td>
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**SF-182**

Trainee and/or supervisor access Aglearn to verify completion of the module via its SF-182.
Quiz

1. The Field Book and 232 form are synchronized.
   a. True
   b. False
2. Horizon description nomenclature from 1951 is included for conversion purposes.
   a. True
   b. False
3. The most current nomenclature is found in the current *Keys to Soil Taxonomy*.
   a. True
   b. False
4. The most current geomorphic terms should be located in the National Soil Survey Handbook.
   a. True
   b. False
5. The most current listing of special map symbols is found in the Field Book.
   a. True
   b. False