

## OJT Training Module Cover Sheet

**Title: 1201 How to determine soil texture in the USDA Soil Classification System.**

**Type:**     **X** Skill      Knowledge

**Performance Objective:** Trainee will be able to...

- Define textural class definitions.
- Estimate the soil texture class of the most common soils in the area by using a field method provided.

**Target Proficiency:**

- Awareness    Understanding   **X** Perform w/ Supervision  
 Apply Independently    Proficiency, can teach others

**Trainer Preparation:**

- Trainer should be familiar with the assigned reading/review material in the lesson plan that follows.
- Secure soil samples of known textures if possible. Dry, crushed samples are preferred.
- Have the textural triangle available.
- Provide a water bottle, hand towels, & a broad, dull knife or other tool for mixing the soil with water.
- Trainer must be proficient in estimating soil textures.
- Obtain samples of sand, silt, and clay.
- A "Texture by Feel" flow chart is a beneficial guide for the trainee (see attachment).

**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:**

This activity may cause spills of soil or water. Dust is likely. Hands and fingers will become dirty and may also become rough and chapped.

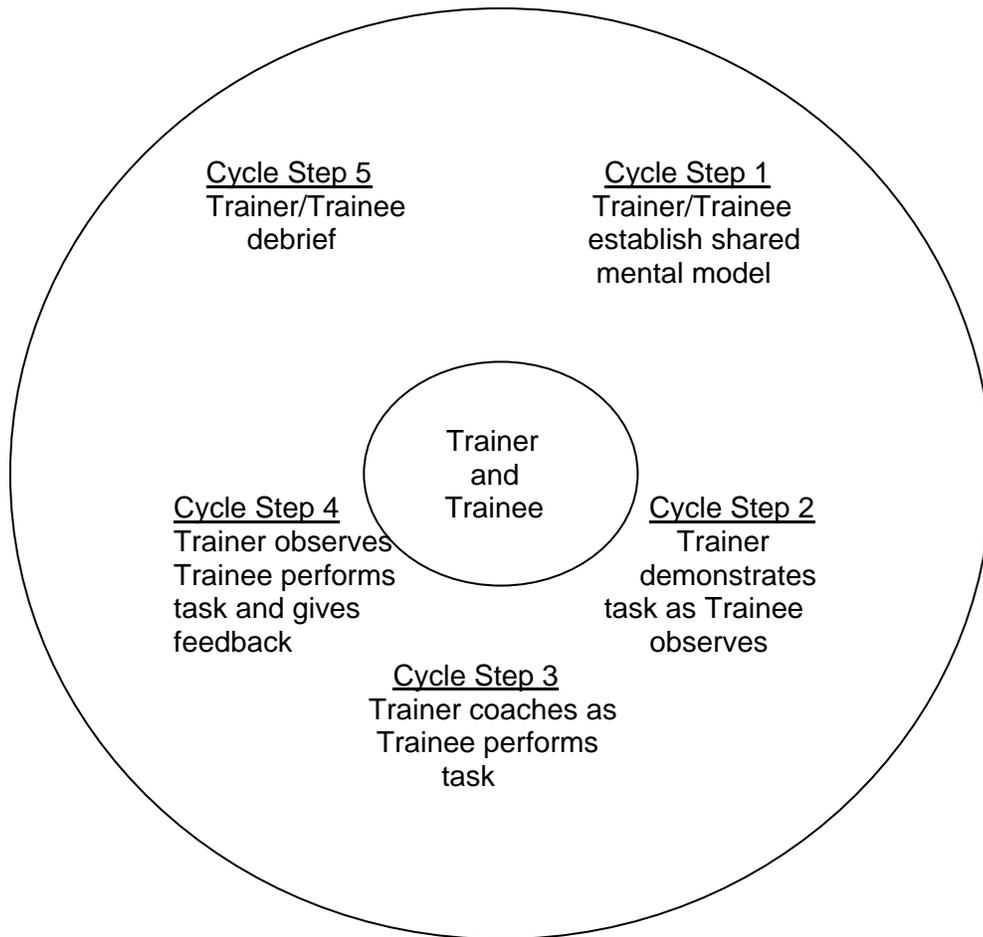
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# The Five-Step OJT Cycle for Procedural Training (Skill)



## OJT Module Lesson

Title: <b>1201 How to determine soil texture in the USDA Soil Classification System.</b>	
<b>WHAT</b>	<b>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</b>
Cycle step 1	Review objectives and prepare for module. Complete the following:
1. Trainer and trainee should review the objectives and field procedure for determining soil texture.	Trainer and trainee should access via the internet and/or hardcopy (Field Book) and read/review: <ul style="list-style-type: none"> <li>• <b>Soil Survey Manual</b>, chapter 3:               <ul style="list-style-type: none"> <li>○ <b>Soil Texture</b></li> </ul> </li> <li>• <b>Field Book for Describing and Sampling Soils</b> <ul style="list-style-type: none"> <li>○ <b>Soil Texture</b></li> </ul> </li> </ul>
2. Discuss the physical characteristics of sand, silt, & clay.	Refer to attached: <ul style="list-style-type: none"> <li>○ <b>Figure-Size of particles</b></li> </ul>
3. Discuss the 12 particle size classes.	Open the attachment: <b>Textural Triangle.pdf</b> .  Review the Textural Triangle and the textural class definitions in the Soil Survey Manual.
Cycle step 2	Do the following:
1. Discuss the field method for determining soil texture.	Open the attachment: <b>Texture by Feel.pdf</b> .
2. Prepare samples for texturing.	Trainer shows trainee how to place 1-2 tablespoons of the soil sample in the palm of the hand, moisten & mix the sample to a putty-like consistency.
3. Estimate the texture.	Trainer shows trainee how to use the "Texture by Feel" flowchart to estimate the soil texture class. <ul style="list-style-type: none"> <li>• Attempt to form a ribbon.</li> <li>• Wetting a sample further, feel for grittiness.</li> </ul>
4. Evaluate the results.	Compare the sample to known data (if available) or to trainer decision upon texturing to determine if the trainee has an understanding.
Cycle steps 3 and 4	Do the following:
Select another sample and repeat the process.	Have trainee repeat with another sample as trainer observes. <ul style="list-style-type: none"> <li>• Trainee should be able to correctly select the texture, or</li> <li>• Place the texture in an adjacent textural class horizontally or vertically within the "Texture by Feel" flowchart.</li> </ul>
Cycle step 5	Repeat until satisfied with trainee's activity.

## OJT Module Lesson Measurement of Learning

Title: **1201 How to determine soil texture in the USDA Soil Classification System.**

<b>WHAT</b>	<b>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</b>
Provide two or more samples, either with data or known based on trainer experience.	Trainee provides texture for each sample without guidance from trainer. Permit use of the "Texture by Feel" flowchart.
Repetition	Repeat until satisfied that trainee knows what he or she is doing.
Repetition	If desired by trainee, attempt texturing samples without the flowchart.

### **SF-182**

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