OJT Training Module Cover Sheet

Title: 106 How to use the Munsell Soil Color Charts to describe soil colors.

Type: ☒ Skill ☐ Knowledge

Performance Objective: Trainee will be able to …

- Use the Munsell Soil Color Charts to describe soil color.

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

Trainer Preparation:

- Trainer should be familiar with the concepts of describing soil color as discussed in Chapter 3, Part 6, of the *Soil Survey Manual*.
- Have soil samples available.

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.
- Have the Munsell Soil Color Charts available.

Prerequisite Modules:
None

Notes:
This module could be done in conjunction with other modules relative to describing soil matrix and feature colors according to NCSS guidelines, including among other properties which include color:

- 107 How to describe soil matrix colors.
- 108 How to describe mottles.
- 109 How to describe redoximorphic features.

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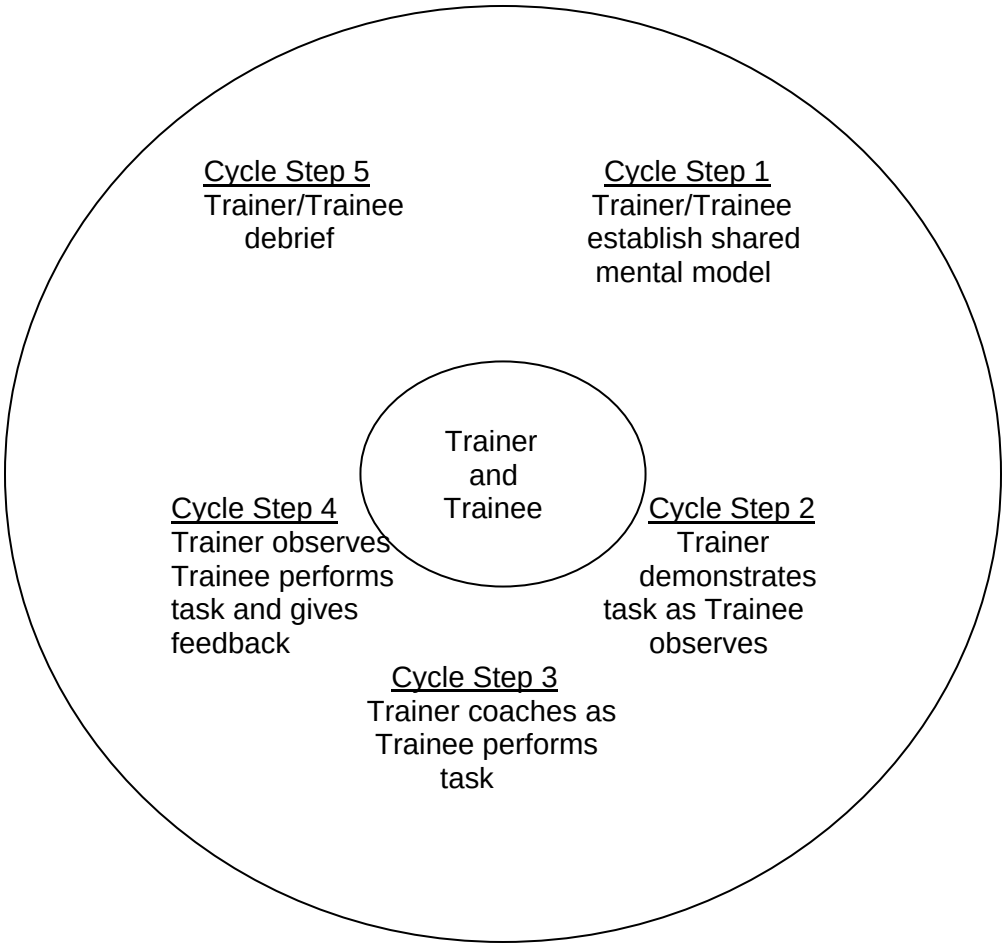
The Five-Step OJT Cycle for Procedural Training (Skill)



OJT Module Lesson

Title: **106 How to use the Munsell Soil Color Charts to describe soil colors.**	
WHAT	**WHY, WHEN, WHERE, HOW, SAFETY, QUALITY**
Cycle step 1	• Trainee should access via the internet and read Soil Survey Manual, Chapter 3, section on **soil color**. • Thumb through the **Munsell Soil Color Charts** to review the charts available. • Agree that this module targets familiarity with the Munsell Soil Color Charts only.
Cycle step 2	Do the following:
1. Review definitions of hue, value, and chroma.	These were part of the reading assignment in the SSM.
2. Review conditions for measuring color.	This was part of the reading assignment in the SSM. Discuss light conditions, moisture content, and roughness (related to broken and crushed samples).
3. Use a “broken” sample to demonstrate locating hue, value, and chroma with the charts.	If doing this module as a stand alone, use samples in the office. If doing it in conjunction with other soil color-related modules, use available pit, road cut, or auger boring. Demonstrate how you “acquire” a broken sample.
4. Use a “crushed” sample to demonstrate locating hue, value, and chroma with the charts.	Demonstrate crushing and smoothing of a sample.
5. Demonstrate how to add water to reach the appropriate moisture state for moist colors.	SSM reading assignment covers this. Discuss and demonstrate as needed.
Cycle step 3	Coaching the trainee, have the trainee use the color charts for broken and crushed samples. Have the trainee add water to a dry sample to reach an appropriate moisture state and use charts for color.
Cycle step 4	Without coaching the trainee, have the trainee use the color charts for broken and crushed samples. Have the trainee add water to a dry sample to reach an appropriate moisture state and use charts for color.
Cycle step 5	Answer any questions. Repeat any steps as necessary.

OJT Module Lesson Measurement of Learning

Title: **106 How to use the Munsell Soil Color Charts to describe soil colors.**	
WHAT	**WHY, WHEN, WHERE, HOW, SAFETY, QUALITY**
Quiz	Complete the quiz below.
Use the soil color charts to describe soil color.	Cycle steps 3 and 4 accomplish this as a measure of learning.

SF-182

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

Quiz

1. Match the following appropriately:

Hue	Degree of lightness or darkness of a color in relation to neutral gray scale
Value	Measure of chromatic composition of light that reaches the eye
Chroma	Relative purity or strength of the spectral color

2. Moist color is made at the point where color does not change with additional moistening.
    a. True
    b. False

3. Dry state for color is air-dry and should be made at the point where color does not change with additional drying.
    a. True
    b. False

4. Which one or more of the following can affect a person's perception of color?
    a. Angle of the sun
    b. Atmospheric conditions
    c. Cloud cover
    d. Type of light source in office or laboratory setting

5. In your survey area, the _____ state is standard and given first in descriptions.
    a. Dry
    b. Moist