

ONLINE TRAINING FOR SOIL AND SITE EVALUATION

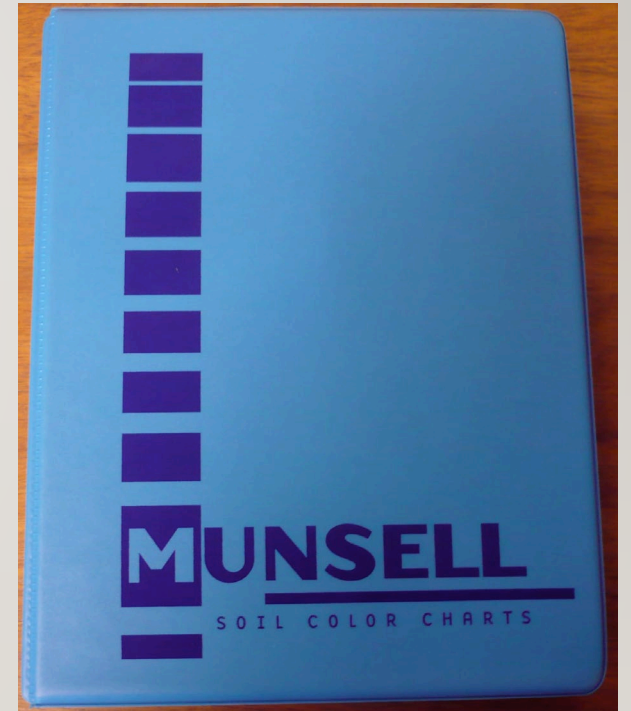
KAREN MANCL, TERESA DEVICTORIA AND BRIAN SLATER

THE OHIO STATE UNIVERSITY

-
- *The materials being presented represent the speaker's own opinions and do NOT reflect the opinions of NOWRA.*

SITE AND SOIL EVALUATION

- First step in design
- In Ohio
 - Certified soil scientists
 - Registered sanitarians



SITE AND SOIL EVALUATION

- First step in design
- In Ohio
 - Certified soil scientists – not enough
 - Registered sanitarians – no soils training required

CONTINUING EDUCATION



Registered sanitarians –
18 hours per year



Onsite installers, pumpers and
service providers –
6 hours per year



Engineers –
15 hours per year

SOIL ENVIRONMENT TECHNOLOGY LEARNING LAB



- 2000 on university farm
- Field instruction for system designers
 - 24 hours over 4 days



PARTICIPATION WAS DECLINING

- Travel cost
- Time away from office
- Asking for an online option



<https://digitalmarketinginstitute.com/blog/the-value-and-importance-of-online-learning>

OBJECTIVE

- soil's practitioner
- assist soil scientists
- gather background/preliminary information
- identify clearly observable limitations



18 HOURS ONLINE INSTRUCTION

- 3 6-hour segments
 - Soil depth and vertical separation distance
 - Soils in the landscape
 - Water and soils

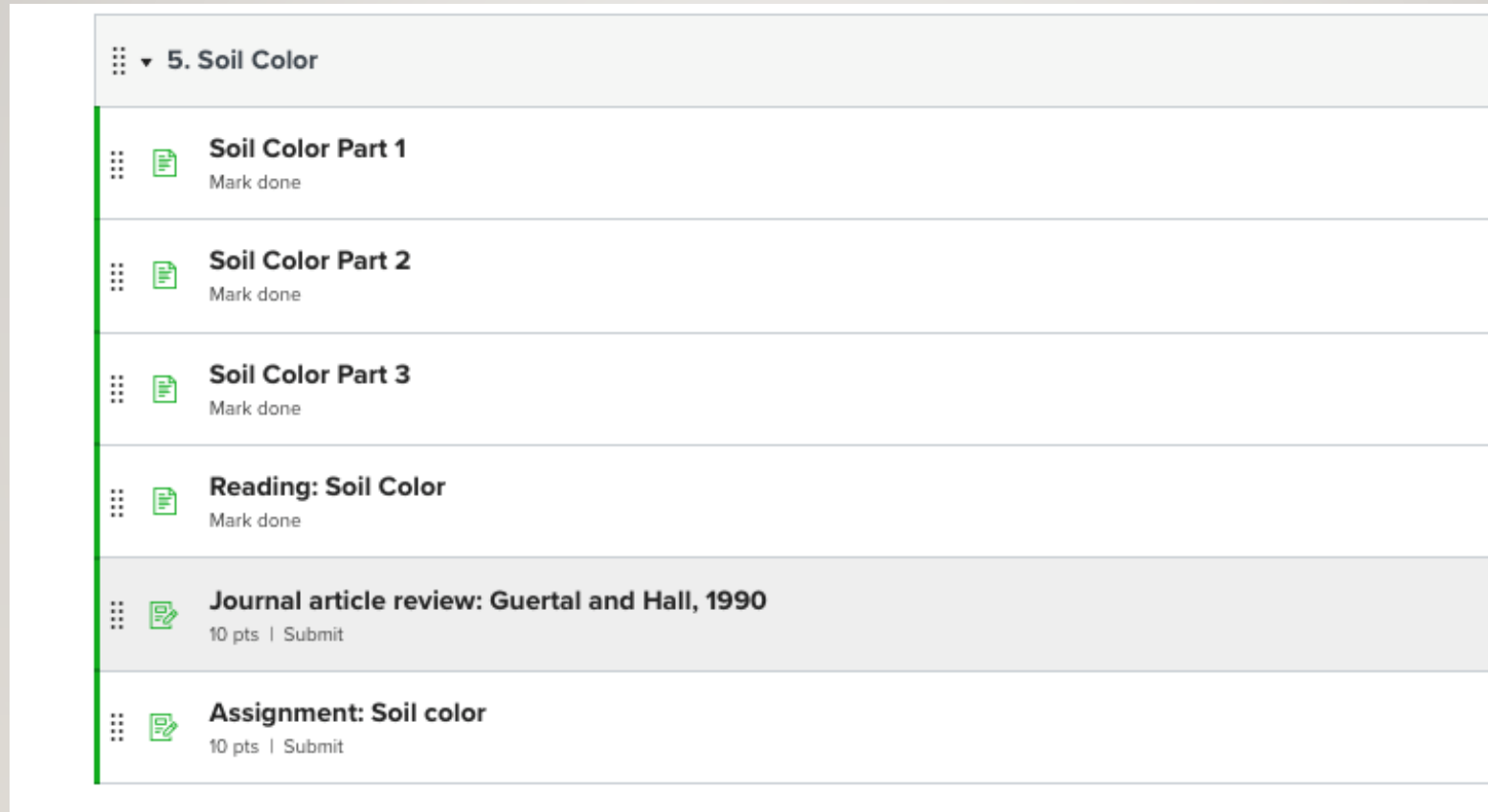


CANVAS INSTRUCTIONAL LEARNING MANAGEMENT SYSTEM







- Branding
- ADA compliance



CANVAS PLATFORM - MODULES



The screenshot displays a Canvas LMS interface for a module titled "5. Soil Color". The module is expanded, showing a list of items. Each item has a three-dot menu icon on the left and a document icon. The items are: "Soil Color Part 1" (Mark done), "Soil Color Part 2" (Mark done), "Soil Color Part 3" (Mark done), "Reading: Soil Color" (Mark done), "Journal article review: Guertal and Hall, 1990" (10 pts | Submit), and "Assignment: Soil color" (10 pts | Submit). The "Journal article review" and "Assignment" items are highlighted with a light gray background.

- ☰ ▼ **5. Soil Color**
- ☰  **Soil Color Part 1**
Mark done
- ☰  **Soil Color Part 2**
Mark done
- ☰  **Soil Color Part 3**
Mark done
- ☰  **Reading: Soil Color**
Mark done
- ☰  **Journal article review: Guertal and Hall, 1990**
10 pts | Submit
- ☰  **Assignment: Soil color**
10 pts | Submit

SEGMENTS

- Modules – 6 to 9
 - Lectures
 - Demonstrations
 - Readings
 - Assignments



VIDEOS

- Classroom lectures
- Field demonstrations
- 10 minutes or less



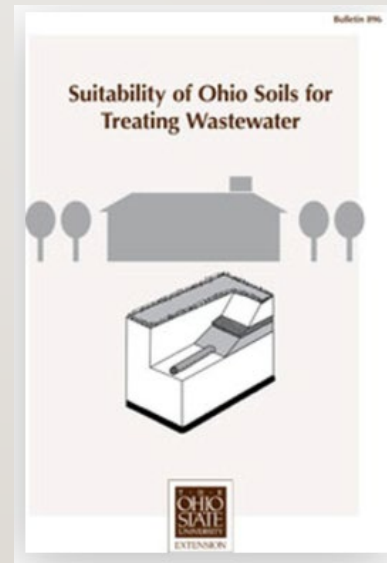
FIELD DEMONSTRATIONS



READINGS

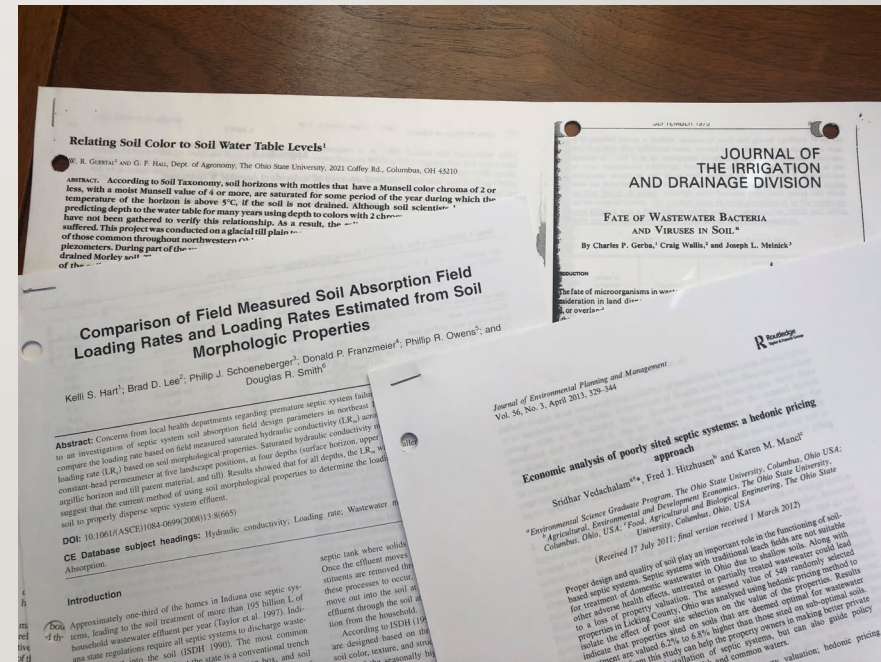
- **Wetland Soils: Genesis, Hydrology, Landscapes and Classifications.**

Vepraskas, M. and C. Craft. 2016.



10 JOURNAL ARTICLES

- Scientific research on wastewater treatment



ASSIGNMENTS – HOME AND GARDEN

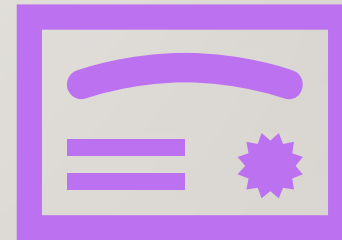
Soil Color – Using Munsell Color Book

	Hue	Value	Chroma
Coffee			
Chili powder			
Curry powder			
Coco powder			

SEGMENT QUIZ



Must complete assignments
before quiz opens



Must pass quiz to receive
6-hour certificate

RESULTS

1

Pilot offering – 3 sanitarians
and 1 contractor

2

2021 offering – 10 sanitarians
and 2 contractors

FUTURE – AFTER COVID

- Following online – 3 6-hour field days

PILOT FIELD DAY

- Students know what to do
- Low confidence
- Repeat field observations with soil scientist

SETLL.OSU.EDU

SETLL

Soil Environment Technology Learning Lab



THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

CFAES

Home

Photo Gallery

News

China

People

Events

Publications

Research

SETLL Systems

OSU Extension

SITE AND SOIL EVALUATION

Workshops and field days are held to teach installers, inspectors and designers of onsite sewage treatment systems what...

[READ MORE >](#)

