

MSO Soils Class – September 15, 2023

Agenda

Start time – End time		Contact Hours
8:00 AM – 8:30 AM	Registration Check-In and Light Breakfast Refreshments	
8:30 AM – 9:30 AM	Class Topic #1	1
9:30 AM – 9:45 AM	Break	
9:45 AM – 10:45 AM	Class Topic #2	1
10:45 AM – 11:00 AM	Break and travel to field site	
11:00 AM – 12:30 PM	Field Work	1.5
12:30 PM – 1:15 PM	Lunch break (provided)	
1:15 PM – 2:45 PM	Field Work	1.5
2:45 PM – 3:15 PM	Wrap – up discussion in classroom and evaluations	0.5
		Total Hours:
		5.5

Class Topic #1 Description: Missouri geology and soils will be discussed and examined. Missouri has a diverse geology that influences the soil types that are available for wastewater treatment. Participants will see the major geological features that mark up our landscape. The class will then start a discussion on the soils across the landforms. This will discuss how the soil changes with the landscape on site.

Class Topic #2 Description: Continuation of soils across landscape discussion. Topics will include ridges, outcrops, floodplain soils, Loess hills, and slope aspect; their influences on wastewater treatment. Finally, prior to field work, the class will have a brief overview of soil profile descriptions and texturing. Known soil textures will be available around the classroom for participants to get familiar with texturing prior to field work.

Field Work Description:

The class participants will tour no less than 3 soil pits that have been previously described by soil evaluators. The discussion throughout the sites will include the following:

- Soil Profile Judging Mock Contest – Participants will describe a soil pit using the tools provided to delineate soil horizons, texture, clay content, coarse fragment content, etc. Afterwards, discussion will follow based on the previously described soil pits by the soil evaluators.
- Texturing known soil samples – Participants will texture soil samples from the site that have been lab tested. This will grow participants’ ability to know soil particle content to a few percentage points.
- Examining possible treatment system options – Participants will discuss what type of treatment system options will work at each soil pit site.