

**NRES 251: Introduction to Soil and Water Resources  
Spring Semester 2021  
LABORATORY**

**Laboratory Instructor:**

Dr. Joshua Raabe

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Office: 174 Trainer Natural Resources Building

Office Phone: 715-346-2689

Virtual Office Hours: Wednesday, 9:00-11:00; also by appointment (e-mail first)

<https://uwsp.zoom.us/j/94350764366>

**Laboratory Meeting Times and Locations:**

In-Person meetings will occur in 262 and 258 Trainer Natural Resources Building **OR** we will meet at a specified location in Schmeckle Reserve for our field trip laboratories. No in-person meetings will occur for laboratories listed as Virtual. Please see the schedule below to learn where and when you will be meeting.

Section 1-3:

Cohort A Tuesday 12:00 pm – 12:50 am - Students with last name starting with A-J  
Students with last name starting with A-C meet in room TNR 262  
Students with last name starting with D-J meet in room TNR 258

Cohort B Tuesday 1:00 pm – 1:50 am - Students with last name starting with K-Z  
Students with last name starting with K-M meet in room TNR 262  
Students with last name starting with N-Z meet in room TNR 258

**Laboratory Expectations:**

Each lab section will be split into 2 cohorts (Cohort A and Cohort B). Cohort A will start at the beginning of the scheduled lab period and Cohort B will start 1 hour later. All in person labs and field trip exercises will be completed in 50 minutes. Directions for the week's exercise will be posted on Canvas by Friday of the proceeding week. In order for us to complete lab exercises in a timely manner you must have a good idea of what you are going to do during your lab before it starts.

**You must read and watch these directions BEFORE lab!**

Field trips will be held in Schmeckle and students will walk to a meeting place determined by your instructor. Virtual labs will be done entirely online. If you are enrolled in an online-only lab section your instructor will be reaching out to you to describe how lab exercises will be presented to you.

**Laboratory Schedule (could change as semester progresses):**

<b>Week</b>	<b>Date</b>	<b>Topic</b>
1	1/25 – 1/29	<b>In Person</b> – Soil horizons, forming factors, and texture (p. 3)
2	2/1 – 2/5	<b>In Person</b> – Soil density, porosity, and volumetric moisture (p. 19)
3	2/8 – 2/12	<b>Virtual</b> – Watershed analysis – GIS (p. 100)
4	2/15 – 2/19	<i>NO LABORATORY</i>
5	2/22 – 2/26	<b>Virtual</b> – Water and heat in a soil profile (p. 37)
6	3/1 – 3/5	<b>Virtual</b> – Soil survey and interpretation for land use planning (p. 123)
7	3/8 – 3/12	<b>Virtual</b> – Water supply and wastewater treatment (p. 75)
8	3/15 – 3/19	<b>LABORATORY QUIZ 1</b>
9	3/22 – 3/26	<i>SPRING BREAK</i>
10	3/29 – 4/2	<b>Virtual</b> – Stream flow measurements and stream formation (p. 53)
11	4/5 – 4/9	<b>In Person</b> – Principles of ground water hydrology (p. 83)
12	4/12 – 4/16	<b>Virtual</b> – Ground water resource - Little Plover River GIS (p. 95)
13	4/19 – 4/23	<i>NO LABORATORY</i>
14	4/26 – 4/30	<b>In Person (field trip)</b> – Soil profile description writing (p. 45)
15	5/3 – 5/7	<b>In Person (field trip)</b> – Wetlands, water quality – Moses Creek (p. 67)
16	5/10 – 5/14	<b>LABORATORY EXAM 2</b>

Pages listed are the first page for each topic in the Laboratory Manual.