

## Laboratory for Introduction to Soil & Water Resources

**Course:** NRES 251 – Sections 3 and 4, Spring 2022

**Laboratory:** Section 3: Tuesday, 12:00-1:50, TNR 262  
Section 4: Wednesday, 12:00-1:50, TNR 262

**Instructor:** Joshua K. Raabe, PhD

**Contact Information:** jraabe@uwsp.edu, TNR 174, 715-346-2689 (office phone)

**Office hours:** Wednesday, 9:00-10:45 (online & office) & by appointment (e-mail first)  
<https://wisconsin-edu.zoom.us/j/91824169049>

**Goal:** My overall goal is for students to learn why soil and water resources are so important and the basic techniques used in these fields.

**Communication:** Students are expected to routinely check their UWSP e-mail and Canvas course site for updates and materials.

**Manual:** Each student should read weekly lab materials before lab and bring their manual to lab every week.

**Lab Homework:** Weekly (14) homework assignments relating to lab exercises will be provided (NOT in the lab manual). Each assignment is 5 points and should be submitted on Canvas by the due date – typically the next Friday.

**Due Dates / Late Policy:** Assignments should be turned in by the due date. Assignments turned in late will have 1 point deducted per day late.

**Lab Exams:** Two 25 point laboratory exams (50 total points) covering half of the lab material will be given at the middle and end of the semester during regularly scheduled lab periods or on Canvas. Each exam must be taken by the due date or a score of zero will be assigned. Illness or a family emergency may be cause for rescheduling an exam, but only with prior notification (e-mail and voicemail have date and time stamps).

**Lab Attendance:** Attendance is mandatory, missing labs may result in partial or complete loss of points. If you cannot attend your lab session, you may arrange to attend another lab session with permission of both lab instructors, but you are responsible for completing and turning in any assignments to me by due dates for your lab section.

**Field Trips:** Please be on time (preferably early) for all labs, especially field trips as we will be on a tight schedule. Please dress accordingly for field trips, such as warm clothes! I will need a few students to assist with driving (must go through University procedure). Please be respectful to myself and all drivers.

**Academic Integrity:** I expect all students to strictly adhere to the high level of conduct and academic integrity at UWSP. All forms of plagiarism, cheating, and academic dishonesty are prohibited; violations will follow UWSP procedures. I reserve the right to use plagiarism software on assignments. The minimum penalty for a violation of academic integrity is failure (score of zero) of the assignment, but penalties can be stricter. For more information, please see the UWSP “Student Academic Standards and Disciplinary Procedures” section of the *Rights and Responsibilities*, Chapter 14:  
<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf>

**Disability Policy:** If you are a student with disabilities, please contact me at the beginning of the semester. We will work together to accommodate any disabilities according to UWSP policies and the Americans with Disabilities Act (ADA), a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. Students must register with UWSP Disability and Assistive Technology Center and provide proper documentation. For more information, please visit the links below and the Disability and Assistive Technology Center, located on the 6th floor of the Learning Resource Center (the Library).  
<http://www4.uwsp.edu/special/disability/>  
<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyInfo.pdf>

**Safety Procedures:** *Medical emergency:* call 911 or use the hallway red emergency phone, offer assistance if trained and willing, guide emergency responders to victim. *Tornado warning:* remain in TNR 262 until advised otherwise. *Fire alarm:* calmly evacuate building, meet in courtyard near library stairs, notify me or emergency command personnel of any missing individuals. *Active shooter:* Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders. Additional details and information:  
[www.uwsp.edu/rmgt](http://www.uwsp.edu/rmgt)

**COVID-19:** The health and safety of our students, faculty and staff are top priorities. We are committed to addressing concerns regarding the 2019 novel coronavirus (COVID-19) and will continue to provide information on how we are slowing the spread on our campus. All students, faculty and staff will follow the UWSP policies and guidelines pertaining to the COVID-19.

See: <https://www.uwsp.edu/coronavirus/Pages/default.aspx>, call the UWSP COVID hotline at 715-346-2619, Monday through Friday from 7:45 a.m.-4:30 p.m., or email [covid@uwsp.edu](mailto:covid@uwsp.edu).

Until further notice, the **wearing of face coverings is mandatory** at all UW-Stevens Point campus locations, in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the [Disability and Assistive Technology Center](#) to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to my discretion. Failure to adhere to this requirement could result in formal withdrawal from the course.

- Please monitor your own health each day. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email me and contact Student Health Service (715-346-4646).
  - **As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.**
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.

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

<b>Week</b>	<b>Date</b>	<b>Topic</b>
1	1/24 – 1/28	Soil horizons, forming factors, and texture (p. 3)
2	1/31 – 2/4	Soil density, porosity, and volumetric moisture (p. 20)
3	2/7 – 2/11	Soil cation exchange capacity (p. 42)
4	2/14 – 2/18	<b>Field trip</b> – Lake characteristics (p. 60)
5	2/21 – 2/25	Principles of ground water hydrology (p. 84)
6	2/28 – 3/4	Watershed analysis – GIS (p. 101)
7	3/7 – 3/11	<b>Field trip</b> – Water supply and wastewater treatment (p. 76)
8	3/14 – 3/18	<b>LABORATORY QUIZ 1</b>
9	3/21 – 3/25	<i>SPRING BREAK</i>
10	3/28 – 4/1	<b>Field trip</b> – Water and heat in soil profile (p. 38)
11	4/4 – 4/8	<b>Field trip</b> – Wetlands and water quality (p. 68)
12	4/11 – 4/15	<b>Field trip</b> – Ground water and surface water connection – Little Plover River (p. 91)
13	4/18 – 4/22	Ground water resource evaluation – Little Plover River – GIS (p. 96)
14	4/25 – 4/29	<b>Field trip</b> – Soil profile description writing (p. 46)
15	5/2 – 5/6	<b>Field trip</b> – Stream flow measurements and stream formation (p. 54)
16	5/9 – 5/13	Soil survey and interpretation for land use planning (p. 124) <b>LABORATORY QUIZ 2</b>

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