

# SOIL/WATER 366/566 – WETLAND SOILS & WETLAND DELINEATION

## SYLLABUS

### **Instructor**

Bryant C. Scharenbroch, Ph.D.

TNR 278 (office hours: Mondays and Wednesdays at 11-1150 am or when my door is open)

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### **Catalog description**

2 cr. Procedures required for identifying and delineating wetlands for permit review. Characteristics of hydric soils including chemistry, morphology, genesis and classification; hydrology of wetlands; field observation and application of federal and regional guidelines to identify hydric soils. Prerequisites: NRES 251. May not earn credit in both WATR 366 and SOIL 366.

### **Course overview**

This course will cover basic concepts in wetland soils and how wetlands are delineated. The course will cover regulations, threats, function, values and classification systems of wetlands. The course will also explore unique characteristics of wetlands and their soils in Wisconsin and around the world. This course is designed for upper level undergraduate and graduate students in soils, waters, natural resources and related fields. The course is required to fulfill requirements for the Wetland Science Certificate Program. The course grade will be determined from participation, professionalism, pop quizzes, three exams, and a wetland delineation project.

### **Course objectives**

The objectives of the course are such by the end of the semester the students should:

1. Understand the importance of wetlands, regulations governing them and classifications for them in Wisconsin and other areas
2. Understand and utilize technical criteria for identifying wetlands with field indicators of hydric soils, wetland hydrology and hydrophytic vegetation
3. Understand physical, chemical and biological properties of wetland soils

### Textbook\*

Richardson, J.L. and M.J. Vepraskas. Wetland Soils - Genesis, Hydrology, Landscapes and Classification. CRC Press. Boca Raton, Fla. 2001.

\*Additional required and supplemental references will be posted on the course website.

### Schedule

DATE	WK	TOPIC
9/2	1	<i>NO CLASS</i>
9/9	2	Introduction, Definition, Functions, Values, Regulations, and Threats
9/16	3	Properties of Wetland Soils (FIELD TRIP – Moses Creek)
9/23	4	Wetland Indicators: Hydric Soils (FIELD TRIP – Moses Creek)
9/30	5	Wetland Soils Review (FIELD TRIP – Lost Creek)
10/7	6	<i>EXAM 1</i>
10/14	7	Wetland Indicators: Wetland Hydrology
10/21	8	Wetland Indicators: Hydrophytic Vegetation
10/28	9	Wetland Delineation (FIELD TRIP – Moses Creek)
11/4	10	Wetland Delineation (FIELD TRIP – Lost Creek)
11/11	11	<i>EXAM 2</i>
11/18	12	Wetland Classification Systems
11/25	13	Wisconsin Wetlands and Soils
12/2	14	Regionals Wetlands and Soils
12/9	15	Regional Wetlands and Soils
12/17	16	<i>EXAM 3 (Tuesday, 12/17/19 at 1445-1645)</i>

### Meeting times and locations

- Monday at 9-1050 am (lecture) in TNR 255
- Meet at the west end of the TNR for fieldtrips (we will leave promptly at 9 am)

## Evaluation and grading

Grading will be based upon quality of work with components weighted as follows.

- Exam 1 20 points
- Exam 2 20 points
- Exam 3 20 points
- Wetland delineation project 30 points
- Participation, professionalism, pop quizzes, etc. 10 points
- Total 100 points

## Grading scale

A = 93-100; A- = 90-92; B+ = 87-89; B = 83-86; B- = 80-82; C+ = 77-79; C = 73-76; C- = 70-72; D+ = 67-69; D = 60-66; F = <60

## Professionalism and participation

UWSP students must maintain high degrees of professionalism, commitment to active learning and participation. You are expected to maintain integrity in your behavior in and out of the classroom. Any deviation from these expectations will affect your participation and professionalism grade for the course. Cheating and/or plagiarism will not be tolerated under any circumstance. Any student found guilty of either will be prosecuted following UWSP Academic Honesty Policy and Procedures. Students are responsible for all material covered in course lectures and laboratory sessions. Laboratory exercises and soil profiles of the day will not be accepted from students missing laboratory sessions without an excused absence. Exercises and assignments that are submitted to the instructor late and without prior approval will not be accepted and scored a zero. Scheduling of make-up examinations will be done only if an absence is due to personal illness, accident, death in the family, or a circumstance deemed legitimate by the instructor. Make-ups for field trips are not available.

## Emergency procedures

In the event of a medical emergency, call 911 or use the red emergency phones located throughout the campus. Offer assistance, if trained and willing to do so. Guide emergency responders to victim. In the event of a tornado warning, proceed to the lowest level interior room without window exposure. Avoid wide-span rooms and buildings. In the event of a fire alarm, evacuate the building in a calm manner and meet outside the building. Notify instructor or emergency command personnel of any missing individuals. In the event of an active shooter, run, escape, hide and fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders. See UW-Stevens Point Emergency Management Plan at [www.uwsp.edu/rmgt](http://www.uwsp.edu/rmgt) for details on all emergency response at UW-Stevens Point.