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

SYLLABUS

Instructor

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Catalog description

3 cr. Characteristics of hydric soils including chemistry, biology, physics, morphology, genesis, and classification. Review and demonstrate procedures for identifying and delineating wetlands using indicators of hydric soils, hydrophytic vegetation, and wetland hydrology. 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 performance on 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 and utilize technical criteria for identifying wetlands with field indicators of hydric soils, wetland hydrology, and hydrophytic vegetation.
2. Understand physical, chemical, and biological properties of wetland soils.
3. Understand wetland classifications and unique characteristics or Wisconsin wetlands and wetlands in other parts of the United States.

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 readings will be posted on the course website.

Evaluation

A variety of methods will be used for student evaluation. These include performance in examinations and exercises. Exercises will include field and laboratory activities that may include groupwork. The examinations may include multiple choice, true/false, fill in the blank, matching exercises, calculations, problems sets, short answers, and/or essay questions. Course grading will be based upon quality of work with components weighted as follows.

ITEM	VALUE	WEEK DUE
Exercise 1 – Hydric soils	10	5
Exercise 2 – Hydrophytic vegetation	10	6
Exercise 3 – Wetland hydrology	10	7
Exercise 4 – Wetland delineation	10	9
Exercise 5 – Wetland classification	10	13
Exam 1	25	8
Exam 2	25	16
Total	100	N/A

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

Schedule

DATE	WK	TOPIC
9/6	1	NO CLASS
9/13	2	Introduction and definition
9/20	3	Wetland soil properties
9/27	4	Hydric soils*
10/4	5	Hydrophytic vegetation*
10/11	6	Wetland hydrology*
10/18	7	Delineation methods*
10/25	8	EXAM 1
11/1	9	Functions and values
11/8	10	Regulations and threats
11/15	11	Wetland classification systems
11/22	12	Wetland classification systems
11/29	13	Regional wetlands and soils
12/6	14	Regional wetlands and soils
12/13	15	MAKE-UP TIME
12/14	16	EXAM 2 (1445 to 1645)

Meeting times and locations

- We will meet on Mondays at 9-1050 am (lecture) in TNR 170.
- We will be meeting at Schmeeckle Reserve and/or other wetlands for some lectures. Specific days and meetings locations will be announced. *Potential fieldtrip dates.
- Students may be required to conduct some fieldwork on their own to complete the exercises. Students on the UWSP campus can work in the Schmeeckle Reserve. Students must complete the teaching and research user permit prior to working in the reserve: https://www.uwsp.edu/cnr-ap/schmeeckle/Pages/education/Schmeeckle_use_permit.aspx

Participation and late work

Students are responsible for all material covered in this course. Exercises 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 fieldtrips and other field activities are not available.

Professionalism and cheating

UWSP students must maintain high degrees of professionalism and commitment to active learning. You are expected to maintain integrity in your behavior in and out of the classroom. 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.

Use of course materials

Materials and recordings for this class are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

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 for details on all emergency response at UW-Stevens Point.

Special rules and considerations during COVID19

Face coverings:

- At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory 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 the discretion of individual instructors.
- Failure to adhere to this requirement could result in formal withdrawal from the course.

Other guidance:

- Please monitor your own health each day using this screening tool. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor 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.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- 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 appropriate hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.