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 undergraduate and graduate students in soils, waters, natural resources, and related fields. The course is required to for the Wetland Science Certificate Program. The course grade will be determined from the rubric in this syllabus.

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, exercises, and other activities. 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. Students are expected to be professional and participate in the course. 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 restoration	10	12
Exercise 6 – Wetland classification	10	14
Exercise 7 – Regional wetlands	10	16
Exam	25	16
Professionalism and participation	5	N/A
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	EXERCISE
9/4	1	NO CLASS	N/A
9/11	2	Introduction and definition	N/A
9/18	3	Wetland soil properties*	Hydric soils
9/25	4	Hydric soils*	Hydric soils
10/2	5	Hydrophytic vegetation*	Hydrophytic vegetation
10/9	6	Wetland hydrology*	Wetland hydrology
10/16	7	Wetland delineation*	Wetland delineation
10/23	8	Wetland delineation*	Wetland delineation
10/30	9	Functions, values, regulations, and threats	N/A
11/6	10	Wetland restoration*	Wetland restoration
11/13	11	Wetland restoration*	Wetland restoration
11/20	12	Wetland classification systems	Wetland classification
11/27	13	Wetland classification systems	Wetland classification
12/4	14	Regional wetlands and soils	Regional wetlands
12/11	15	Regional wetlands and soils	Regional wetlands
12/20	16	EXAM (during final exam period 1230 to 1430)	

Meeting times and locations

- The course meets on Mondays at 9-1050 am.
- Indoor lecture meeting location is TNR 120.
- Outdoor lecture meetings* (weeks 3-9, and 11) will be announced for each date. Many of the outdoor lectures will be at the Schmeeckle Reserve.
- This course includes significant fieldwork. To accommodate this fieldwork, students are required to review the lecture materials (readings, lecture slides, and lecture video) BEFORE coming to class. This is 3 credit course with 2 hours of lecture each week. The remaining 1 hour per is expected to occur out of classroom time.
- 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.