SOIL 365/565 – SOIL QUALITY ASSESSMENT AND SOIL SURVEY INTERPRETATION

SYLLABUS

Instructor

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TNR 278 (office hours: by virtual appointment during COVID19)

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Catalog description

3 cr. Apply soil survey information to make interpretations for various land uses; identify the limitations and suitability of soils for specific planning purposes. Understand and assess soil quality in situations where soil survey information will not suffice; interpret soil quality assessment for land use and management. Prerequisites: Summer Field Experience, CNR major or written cons instr.

Course overview

This course covering soil quality assessment and soil survey interpretation is designed for upper level undergraduate and graduate students in soils, forestry, natural resources, land use planning and related fields. Weekly, the course includes a one-hour lecture, a one-hour discussion and a two-hour laboratory session. The course is divided into two sections: (1) soil quality assessment and (2) soil survey interpretation. Students will complete six exercises and two exams for the course grade.

Course goal

Students will understand and demonstrate how soil quality assessment and soil survey interpretation information can used for evaluating soils for use and management.

Course learning outcomes

- 1. Students will understand what soil quality is and why it is important
- 2. Students will be able to perform soil quality assessments
- 3. Students will be able to interpret soil quality for land use and management purposes
- 4. Students will understand what soil survey is and why it is important
- 5. Students will understand the data contained within soil survey
- 6. Students will utilize data from soil survey in land use planning

Textbook and readings

- No textbook is required for this course.
- All required reading for the course will be placed 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 – Introduction to Soil Quality	5	4
Exercise 2 – Soil Quality Indicators	5	6
Exercise 3 – Soil Quality Project	10	9
Exercise 4 – Introduction to Soil Survey	5	10
Exercise 5 – Web Soil Survey	5	11
Exercise 6 – Soil Survey Project	20	15
Exam 1	25	8
Exam 2	25	15
Total	100	N/A

Grading scale

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

Schedule

DATE	WK	LECTURE	DISCUSSION/LAB	
8/31	1	Welcome and Class Introduction	NO MEETING	
9/7	2	Introduction to Soil Quality (SQ)	Ex1: Introduction to SQ	
9/14	3	Physical Indicators	Ex1: Introduction to SQ	
9/21	4	Chemical Indicators	Ex2: SQ Indicators	
9/28	5	Biological Indicators	Ex2: SQ Indicators	
10/5	6	SQ Indices	Ex3: SQ project	
10/12	7	SQ Indices	Ex3: SQ project	
10/19	8	EXAM 1		
10/26	9	Introduction to Soil Survey (SS)	Ex4: Introduction to SS	
11/2	10	Introduction to SS	Ex5: Web Soil Survey	
11/9	11	SS Properties and Qualities	Ex6: SS project	
11/16	12	SS Properties and Qualities	Ex6: SS project	
11/23	13	SS Suitabilities and Limitations	Ex6: SS project	
11/30	14	SS Suitabilities and Limitations	Ex6: SS project	
12/7	15	EXAM 2		

Meeting times and locations

- Lecture, laboratory, and discussion sessions will be asynchronous on-line.
- Voluntary synchronous on-line meetings will be available for discussion and questions. Students may attend neither, either, or both meetings. The meetings times are for these synchronous meetings are listed below.
 - o Mondays at 14-1450 (section 2 laboratory/discussion time)
 - Wednesdays at 10-1050 (section 1 laboratory/discussion time)
- Voluntary cohort in-person meetings on UWSP campus for Exercises 1-3 may be available. These meetings would occur during the scheduled laboratory/discussion time periods. More details and specific dates for these meetings will be announced.

Participation and late work

Students are responsible for all material covered in course lectures, laboratory, and discussion sessions. 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 in-person activities are not available. Students wishing to attend alternate laboratory and discussion sections may do so with prior approval from the instructor.

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

Lecture 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.