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

SYLLABUS

Instructor

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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: none.

Course overview

This course covering soil quality assessment and soil survey interpretation is designed for undergraduate and graduate students in soils, natural resources, 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.

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 perform soil quality assessments
3. Students will 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. The instructor may adjust final grades by up to 25% based on student professionalism and participation.

ITEM	VALUE	WEEK DUE
Exercise 1 – Introduction to Soil Quality	5	4
Exercise 2 – Soil Quality Indicators	5	6
Exercise 3 – Soil Quality Project	20	9
Exercise 4 – Introduction to Soil Survey	5	11
Exercise 5 – Web Soil Survey	5	12
Exercise 6 – Soil Survey Project	20	16
Exam 1	20	8
Exam 2	20	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	LECTURE	DISCUSSION/LAB
9/5	1	Introduction to Soil Quality	NO DISC/LAB MEETING
9/12	2	Introduction to Soil Quality	Ex1: Introduction to Soil Quality
9/19	3	Physical Indicators	Ex1: Introduction to Soil Quality
9/26	4	Chemical Indicators	Ex2: Soil Quality Indicators
10/3	5	Biological Indicators	Ex2: Soil Quality Indicators
10/10	6	Soil Quality Indices*	Ex3: Soil Quality Project
10/17	7	Soil Quality Indices*	Ex3: Soil Quality Project
10/24	8	Soil Quality Indices	Ex3: Soil Quality Project
10/31	9	NO LECTURE MEETING	EXAM 1
11/7	10	Introduction to Soil Survey	Ex4: Introduction to Soil Survey
11/14	11	Introduction to Soil Survey	Ex5: Web Soil Survey
11/21	12	Soil Properties and Qualities	Ex6: Soil Survey Project
11/28	13	Soil Properties and Qualities	Ex6: Soil Survey Project
12/5	14	Soil Suitabilities and Limitations	Ex6: Soil Survey Project
12/12	15	Soil Suitabilities and Limitations	Ex6: Soil Survey Project
12/21	16	EXAM 2 (During final exam period on 12/21/22 at 1015-1215)	

*This lecture will not meet in person. An asynchronous online lecture is mandatory.

Meeting times and locations

- Lecture will meet on Tuesdays at 9-950 in TNR 120.
- Laboratory and discussion meetings are combined for each section. Laboratory and discussion meetings will meet in TNR 255, in a computer lab, and/or outside. Meeting locations will be announced.
    - Mondays at 14-1650 (section 2 laboratory/discussion time)
    - Wednesdays at 8-1050 (section 1 laboratory/discussion time)

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 may not be available. Students wishing to attend alternate laboratory and discussion sections must attain instructor approval prior to doing so.

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.