

SOIL/WASTE 387 – ON-SITE WASTEWATER TREATMENT SYSTEMS

SYLLABUS

Instructor

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Catalog description

1 cr. Wastewater treatment process, design, and regulatory requirements for on-site systems. Prerequisites: NRES 251. May not earn credit in both SOIL 387 and WSTE 387.

Course overview

This course covering on-site wastewater treatment systems is designed for undergraduate and graduate students in soils and waste resources, natural resources, and other related fields.

Course objectives

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

1. Understand the basics of a private on-site wastewater treatment system (POWTS).
2. Know the codes and regulations for POWTS in Wisconsin.
3. Know how soils are evaluated to determine the size and type of a POWTS.
4. Know how a site is evaluated for a POWTS.
5. Understand how POWTS are designed.
6. Understand how POWTS are inspected.

Textbook

No textbook is required for the course. Required readings will be posted to 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 examination 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 – Soil and site evaluation for a septic system | 20 | 5 |
| Exercise 2 – Septic system design | 20 | 7 |
| Exercise 3 – Septic system inspection | 20 | 8 |
| Exam | 30 | 8 |
| 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 |
|-------|----|--|
| 9/5 | 1 | Course overview and introduction to septic systems |
| 9/12 | 2 | Codes and regulations for septic systems (Matt Janzen) |
| 9/19 | 3 | Septic system overview and design (William Kolodziej)* |
| 9/26 | 4 | Site and soil evaluation* |
| 10/3 | 5 | Site systems inspection (Shelly Solstice)* |
| 10/10 | 6 | Septic system inspection (Emmett Simkowski)* |
| 10/17 | 7 | NO MEETING |
| 10/24 | 8 | Exam |

Meetings times, locations, and attendance

- Tuesdays at 1200-1350 (lecture) in TNR 255.
- Meeting times and locations for fieldtrips will be announced. *Potential field trip date.
- Attendance is required. Make-up sessions are not available.
- Online materials will be provided, and students are required to study them. No meeting times are built into the course schedule to provide additional time for students to review those online materials.

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 in-person 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.