



TENTATIVE COURSE SYLLABUS

CE 3520 – Civil Engineering Materials – Fall 2019

Course Coordinator

Kay Wille, Ph.D, FLC 324, 6-2074

kay.wille@uconn.edu

Office hours: by appt.

Guest Lecturer

Nefeli Bompoti

James Mahoney

nefeli.bompoti@uconn.edu

james.mahoney@uconn.edu

Lecture (ROWE 320)

Mo 1:25 – 2:15 PM

Lab sessions (CAST 106)

Tue: section 001 (8am – 11am)

Tue: section 002 (11am – 2pm)

Thu: section 003 (11am – 2pm)

Lab Manager:

Jonathon Drasdis, jonathon.drasdis@uconn.edu, FLC 322, 6-3211

Graduate Teaching Assistant:

Rebekah Thielman, rebekah.thielman@uconn.edu

Dongping Zhu, dongping.zhu@uconn.edu

Undergraduate Teaching Assistant:

James Kennedy, james.2.kennedy@uconn.edu

Lab Manual & Texts:

Lab: CE3520 Lab Handouts (available on huskyCT)

Lecture: Materials for Civil and Construction Engineers, Mamlouk and Zaniewski; 4th Edition. **(Required)**

Textbook used in your Soil Mechanics course & classnotes (optional)

Description:

This course presents the basic principles and engineering properties of metals, soil, concrete, asphalt, and wood; laboratory measurement of properties; and interpretation of results.

Grading: Tentative Distribution of points

Pre-lab Quizzes 15% (in preparation of the upcoming lab, individual)

Laboratory Exercises 45% (Lab results write-up, one write-up for each group)

Post-lab Quizzes 10% (based on laboratory exercises, individual)

Content Tests 30% (in class, module specific, in total 6, individual)

Educational Outcomes:

Upon completion of this course, students should be proficient in the ability to:

1. Learn the properties and characterization of main civil engineering materials such as metal, soil, aggregate, concrete, asphalt, wood, etc.;
2. Conduct laboratory tests of civil engineering materials;
3. Develop technical writing skills and experience working as a group.

Laboratory and Lectures:

Description: The laboratory course is organized into topical modules. The laboratory exercises follow theoretical introductions from the lecture portion of CE3520. You are expected to come to Lab having carefully read through the laboratory handout available on huskyCT. Lab exercise results and reports will be submitted the following Lab. The Instructor & TA will collect and grade lab exercises and reports. In certain circumstances (e.g., documented illness), a student may attend a different lab section provided that prior authorization was given. Student grades will be based on lab exercises results & summary submitted as a group. Lab will count as 50% of your final course grade.

Pre-lab quizzes and post-lab quizzes will be available on HuskyCT and will count 10% each of your course grade.

Six in class content quizzes will be taken during the semester. Material for these content quizzes will be provided through reading assignments and instructional videos uploaded to HuskyCT. Content quizzes will count as 30% of your final course grade. The guidelines and expectations for the lab exercises/reports will be discussed in class.



Class Policy:

Attendance: Regular and punctual attendance in lecture is strongly encouraged. While certain charts, figures, tables, and other materials presented in lecture may be posted on HuskyCT, it is critical that students attend the lecture to understand the context in which they are applied to solving problems. In other words, your textbook and supplemental materials are excellent resources, but are not adequate substitutes for the lecture. In the event of any absence, it is the responsibility of the student to obtain the notes for that class as well as any handout materials or information that may have been announced.

Academic Integrity: Students are expected to behave in a professional manner. Cheating, plagiarism, self-plagiarism, and copying are considered to be severe offenses. Any collaborative behavior (talking, discussing, copying) during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action. Unless otherwise specified, all work in this course is considered an individual exercise. Students are permitted to work on the problem sets together in collaborative fashion; however, the assignments must be turned in on an individual basis. This policy does not permit splitting of assigned problems, as any act of copying without actually working on a given problem is considered of form of plagiarism. The relevant university policy on student conduct and academic integrity are detailed in Section IV and Appendix A of The Student Code, which includes the following relevant passages.¹

Academic misconduct is dishonest or unethical academic behavior that includes, but is not limited, to misrepresenting mastery in an academic area (e.g., cheating), intentionally or knowingly failing to properly credit information, research or ideas to their rightful originators or representing such information, research or ideas as your own (e.g., plagiarism). The appropriate academic consequence for serious offenses is generally considered to be failure in the course. For offenses regarding small portions of the course work, failure for that portion is suggested with the requirement that the student repeat the work for no credit.

¹Community Standards. Responsibilities of Community Life: The Student Code, Division of Student Affairs, University of Connecticut, 2009.

Classroom expectations: You are expected to arrive before the class is scheduled to begin and remain in your seat during the entire scheduled class time. If you have a cell phone with you, silence the ringer before coming to class. Other electronic devices, such as tablets or laptops, are allowed during the lecture as long as no other students get distracted and find it more difficult to follow the lecture.

Disability: The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the accommodations process is also available on their website at www.csd.uconn.edu.

University Resources:

UConn provides a number of important resources designed to help students maximize their academic potential and overall college experience.

- UConn Writing Center (<http://www.writingcenter.uconn.edu/>)
- Quantitative Learning Center (<http://www.qcenter.uconn.edu/>)
- Digital Learning Center (<http://dlc.uconn.edu/about.html>)
- Academic Achievement Center (<http://web2.uconn.edu/uconnconnects/AAC.htm/>)
- Counseling and Mental Health Services (<http://www.cmhs.uconn.edu/>)
- Sexual Violence Awareness (<http://sexualviolence.uconn.edu/>)
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships (<http://policy.uconn.edu/?p=2884/>)
- Sexual Assault Response Policy (<http://policy.uconn.edu/?p=2139/>)

Week	Date	Day	Topic Module	Instructor	Reading (Ch. # for Mamlouk & Zaniewski)
1	26-Aug	Mo	Introduction / Testing Devices	Dongping / Dr. Wille	Ch. 1
	27/29-Aug	Tu/Th	No Lab		
2	2-Sep	Mo	Labor Day – No Lecture*		
	3/5-Sep	Tu/Th	Lab 1- Measuring Devices	Dongping	Appendix 1
3	9-Sep	Mo	Metals Properties and Testing (Test #1)	Dongping / Dr. Zaghi	Ch. 3 & 4 (Section 4.3 only)
	10/12-Sep	Tu/Th	Lab 2- Tension, Torsion	Dongping	Appendix 2 & 3
4	16-Sep	Mo	Sieve and Hydrometer Analysis	Rebekah / Dr. Wille	PPT (HuskyCT), Review sieve & hydrometer notes from CE3510
	17/19-Sep	Tu/Th	Lab 3- Sieve and Hydrometer Analysis	Rebekah	Appendix 7
5	23-Sep	Mo	Aggregates and Specific Gravity (Test #2)	Dr. Wille	Ch. 5
	24/26-Sep	Tu/Th	Lab 4- Specific Gravity	Dongping	Appendix 8 & 9
6	30-Sep	Mo	Portland Cement (Test #3)	Dongping / Dr. Wille	Ch. 6
	1/3-Oct	Tu/Th	Lab 3- Sieve and Hydrometer Analysis	Rebekah	Appendix 7
7	7-Oct	Mo	Asphalt Materials (Test #4)	Dongping / Dr. Wille	Ch. 9
	8-Oct	Tu	Lab 5- Tour CAP Lab (8:30 & 11:30am)	Dongping / Mahoney	
8	14-Oct	Mo	Concrete (Test #5)	Rebekah / Dr. Wille	Ch. 7
	15/17-Oct	Tu/Th	Lab 6- Concrete Mix, Slump test, and Cylinder Casting	Rebekah	Appendix 11 & 17
9	21-Oct	Mo	No lecture		
	22/24-Oct	Tu/Th	Lab 7- 7-day concrete compression testing	Rebekah	Appendix 17
10	28-Oct	Mo	Proctor Compaction, Bulk Density, Voids	Rebekah / Dr. Bompoti	Review soils compaction testing notes
	29/31-Oct	Tu/Th	Lab 8- Proctor Compaction	Rebekah	
11	4- Nov	Mo	Plasticity	Rebekah	Review soils plasticity
	5/7- Nov	Tu/Th	Lab 9- Plasticity	Rebekah	
12	11- Nov	Mo	Wood Materials (Test #6)	Rebekah / Dr. Wille	Ch. 10
	12/14- Nov	Tu/Th	Lab 10- Wood and Metals bending & 28-day concrete compression testing	Rebekah	Appendix 30
13	18- Nov	Mo	Direct Shear	Rebekah / Dr. Bompoti	Review soils strength & Direct Shear notes from CE3510
	19/21- Nov	Tu/Th	Lab 11- Direct Shear testing on soil	Rebekah	
25-29-Nov Mo-Fr THANKSGIVING RECESS					
14	2-Dec	Mo	Soil Strength	Rebekah / Dr. Wille	Review soils strength & UC Test notes from CE3510
	3/5-Dec	Tu/Th	Lab 12- Unconfined Compression on Soil	Rebekah	
15	9-Dec	Mo	NO Final Exam		

This schedule is tentative and subject to change.

(*) as subject to change if there is a class/lab cancellation during the semester. "No Lab / Lecture" periods are available as make-up dates.

Disclaimer: All information on this syllabus is tentative, and the instructor reserves the right to make revisions as necessary.