

Three Rivers Community College

Soils Lab –

Lab CIV K 201
Spring 2014

Instructor; Donald W. Gerwick, P.E., L.S.

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Office Location: 205W Office Hours: M & W 3:30 p.m. – 5:00 p.m.
Additional Days and Times by Appointment are Available

Class Location – B 107;
Times: Thursday 3:46 – 5:25.

Text: **Soils and Foundations**, 7th edition; Cheng, Liu & Evett, Jack B.
Portions of the text will be utilized and will be augmented with additional materials as listed.

Studying the engineering properties of soils, applications to multidisciplinary fields will be investigated. A variety of labs will be conducted to assess engineering properties; how soil can be controlled and used to prevent degradation of natural environments; as a clarifier of degraded waters, as well as soils potential for positive and negative impacts on structures and other construction related projects. The course includes a design project involving design of a sanitary subsurface disposal system using the CT Health Code Technical Standards. (instructions for internet download will be provided with project hand out).

Course Outcomes – Students who successfully complete the course shall have a good understanding of the physical properties of soil as well as their behavior with respect to loads, shear and consolidation. Students will also gain a fundamental understanding of the movement of water through soils

Portfolio - Each student will maintain a 3 ring binder portfolio of all labs. The portfolio will consist of your syllabus, all handouts, all homework, assignments and all lab instructions, lab notes, lab write ups and any and all other material associated with your labs. **Portfolio's will be handed in at the end of the semester and will NOT be returned**, so the student should make copies of all work that they would like to keep for themselves. Lab portfolio's will count for 25% of your lab grade; failure to turn in a portfolio by the date of the last class, will result on a "0" for that portion of the lab grade.

Lab 1 – Soil Identification – This lab introduces students to basic soil identification, their physical properties and parent material.

Lab 2 – Mechanical Sieve Analysis – This lab will teach the students how to sieve, record and plot their results.

Lab 3 - Moisture content

Lab 4 - Proctor test

Lab 5 – Attenburg Limits

Lab 6 – Permeability

Lab 7 - Fine Grained Soils Impact on Permeability.

Lab 8 - Perc Test

Lab 9 – Test Holes Site Visit (counts as 2 labs, off campus and is dependent on weather and ability to schedule with willing property owner).

Lab 10 Sanitary System Design, part 1

Lab 11 Septic Sys. Design part 2

Lab 12 Septic Sys. Design part 3

Labs 13 & 14 - Will consist of Capstone Presentations

No lab on the final day of classes.

Final Grade – CIV K201 – Lab grade will be based on your average of your lab reports (90%) and your lab portfolio (10%). Please note that the Soils Labs (201) and Lecture (CIV 201) are recorded as separate grades.

Attendance & Lab Grades Missed labs generally cannot be made up, and will receive a “0” grade, unless arrangements have been made with the instructor.

Portfolio - Each student will maintain a 3 ring binder portfolio of all labs. The portfolio will consist of course syllabus, all homework and assignments, all handouts and all lab instructions, lab notes, work sheets, copies of all field book notes from the semester, lab write ups and any and all other material associated with your labs. **Portfolio’s will be handed in at the end of the semester and will NOT be returned**, so the student should make copies of all work that they would like to keep for themselves. Lab portfolio’s will count for 10% of your lab grade; failure to turn in a portfolio by the date of the last class, will result on a “0” for that portion of the lab grade.

Class Attendance is expected, although, while students will not be penalized for non-attendance (with the exception as noted above for labs) they will be responsible for material covered in their absence. It

will be the student's responsibility to determine what assignments, quizzes or material that may have been missed, and to make arrangements to turn in missed work. If students miss a quiz they must be prepared to take the quiz the day they return to class unless other arrangements have been made in advance with the instructor. Should for **any reason** the quiz is not made up upon return to class it is the students responsibility to make arrangements to take a make up quiz.

Class Room Policies - Cell phones brought to class shall be off and out of site (no texting). Language and behavior that is disrespectful, or disruptive, to others is unacceptable; Students should refer to their Student Handbook for examples of such behavior as well additional school policies.

Academic Integrity – Unless indicated by specific assignments, by the instructor, for group projects, all work for assignments shall be that of the individual student. Cheating on quizzes or using the work of others without proper credit (plagiarism) for assignments, or other forms of academic dishonesty, as defined by the Student Handbook, is unacceptable. If, after evaluation of the potential infraction(s), consistent with the Student Handbook, a grade of “0” for the assignment may be assigned.

Disabilities – If you have a visible or hidden disability that may require classroom or test taking modifications you are encouraged to see me and to contact Student Services for assessment.

myCommNetAlert – Please sign up.

myCommNet Alert is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather.

All students are encouraged to sign up for myCommNet Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site. This link is;

http://www.trcc.commnet.edu/div_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html