

**Construction Management Department
California State University, Chico**

**CMGT 330 – Principles of Soils Mechanics and Foundations
Course Syllabus**

A. Prerequisites

Physics 202A – MANDATORY Prerequisite Course (Grade \geq C)
Chem 107 – Prerequisite Course (Can take concurrently)

B. Meeting Time & Location

CMGT 330-01	Class #3091	McCutcheon	MW	11:00 AM – 11:50 AM; LANG, Room 302
CMGT 330-02	Class #3093	McCutcheon	T	8:00 AM – 10:50 AM; LANG, Room 119
CMGT 330-03	Class #3092	Younger	T	2:00 PM – 4:50 AM; LANG, Room 119
CMGT 330-04	Class #3120	McCutcheon	R	8:00 AM – 10:50 PM; LANG, Room 119
CMGT 330-05	Class #3143	McCutcheon	T	11:00 AM – 1:50 PM; LANG, Room 119
CMGT 330-06	Class #5735	Staff	M	5:00 PM – 7:50 PM; LANG, Room 119

C. Instructor

Scott McCutcheon samccutcheon@csuchico.edu

Office Hours: M 12-2 PM, TH 12-2 PM
or by appointment

Office Location: O'Connell Technology Center, Room 329

Office Phone: 530-898-5216

Rovane Younger: ryounger@csuchico.edu

Office Hours: TBD
or by appointment

Office Location: Langdon 101

Office Phone: 530-898-5216

D. Catalog Description:

A study of the properties and behaviors of soils when used as a construction material. Topics included are compaction, permeability, compressibility, shear strength, etc. Laboratory and field tests are performed, along with an introduction to design principles of foundations and earth structures, concrete, and basic surveying.

E. Course Learning Outcomes (CLO):

Upon successful completion of this course, the student will:

1. Have analyzed concepts, principles, and construction documents, as they relate to the use of soils and concrete in the construction process.
2. Have analyzed methods, materials, and equipment used on construct projects, as they relate to soils, concrete, and surveying.
3. Have understood the application of basic surveying techniques for construction layout and control [**Assess: ACCE-SLO #11**].
4. Have performed construction quality assurance and control testing procedures for soils and concrete [**Reinforce: ACCE-SLO #15**].
5. Have understood the basic principles of soil mechanics, foundations, and their related structural behavior.

6. Have practiced communicating ideas and concepts learned in short, informative, oral presentations designed to enhance the peer learning experience. **[Introduce: ACCE-SLO #2].**

Student Learning Outcomes (SLO):

The American Council for Construction Education (ACCE) prescribes 20 Student Learning Outcomes (SLO) as Educational Objectives for an undergraduate degree program in Construction Management. For a list of these 20 SLOs visit the Chico State Department of Construction Managements website www.csuchico.edu/cm and the SLO link under ACCE Accreditation drop down menu.

The following SLOs are supported by this course in the form of I=Introduction, R=Reinforced, or DA- Direct Assessment:

- SLO 2 – Create oral presentations appropriate to the construction discipline (I). ☒
- SLO 11 – Apply basic surveying techniques for construction layout and control (DA). ☒
- SLO 15 - Understand construction quality assurance and control (R). ☒

ACCE-SLO: American Council for Construction Education – Student Learning Outcomes
http://www.acce-hq.org/images/uploads/Doc_103_OBS_final_103114.pdf

ACCE Direct Assessment Mapping:

<u>SLO</u>	<u>CLO</u>	<u>Assessment Type</u>	<u>When</u>	<u>Target</u>
11	3	QUIZ	15	70% will earn 70% or better

F. Course Resource Materials Requirements:

Textbook: Soils in Construction, 5th Edition, Schroeder, W.L., and Dickerson, S.E. Pearson-Prentice Hall, Publisher.

Laptop Computer: A laptop computer will be required for assigned course work, quizzes, and exams. There are no university provided computers in the classroom.

G. Course Requirements:

Conduct

The faculty believes that students are adults and you will be treated and respected as such. Simply put, this means that you will be held accountable for your actions, your decisions, and the subsequent consequences. We expect each of you to conduct yourself in a professional and mature manner, showing courtesy and respect for fellow students and the instructor. The Student Conduct Code, California Code of Regulations, Title 5, Article Section 41301/Standards of Student Conduct are referenced as a guideline for student behavior in this course.

Advisory Note!

During class time any disruptive or annoying behavior, outbursts, unbecoming language, inappropriate jokes, cursing, or personal visiting during class time will result in you being asked to leave the room. Your personal agenda must be set aside during class time for the greater good of all your classmates.

Honesty in the Classroom

You are expected to be familiar with the University's policy on academic integrity. As such, there will be no tolerance for dishonesty, sharing of work, and especially copied work. Ethical standards as established by the university will be strictly upheld. See THE UNIVERSITY CATALOG.

Tobacco Products

The use of any type of tobacco product (smokeless, chewable or otherwise) is not permitted in any building at California State University, Chico. If you chew tobacco products, please refrain during class time.

Electronic Devices

The use of phones, pagers, MP3 players, and other electronic devices, excluding laptops, is not permitted in class. If you must take a work or emergency call, please EXIT the classroom before answering the call.

Withdrawal from Class

Please refer to the Academic Calendar Deadlines as published in the University Catalog.

Professional Work

As a student looking towards gaining an internship within the construction industry, *it is expected that your completed work will be professional in its presentation*. Consider this course as practice in presenting professional quality industry work to your future employer.

H. Instructional Methods:

This course is designed around the following methods of presenting material to the student:

1. Class discussions and assigned readings/online resources are reinforced by online Blackboard Learn Quizzes.
2. Assignments to be finished outside of class time are designed to reinforce the students learning process.
3. Quizzes and Exams to expand the student's construction vocabulary and comprehension.

I. Assignments:

Assignments will be due at the beginning of class on the date due. Late assignments will not be accepted and will be graded as zero. No exceptions.

All assignments are expected to be organized and legible. Sloppy work will be rejected and graded at zero. Homework assignment requirements will be clearly defined prior to issuance of the first problem set. Assignments will typically be posted on Blackboard Learn.

Lab assignments will require a written report from each student. See the Laboratory Grading Guidelines provided in class for additional details. Particular attention needs to be paid to the understanding of when and why a construction company would perform or have a laboratory test performed. The written report should include at a minimum a description of the purpose, methods, applicable ASTM, photos, results, reasons for any errors, and conclusion. In the event that the student or group does not complete the lab assignment correctly or the test results in questionable data, the lab instructor may at their discretion require the group to perform the lab test a second or third time until the results are acceptable.

Extra Credit may be given for assignments at the discretion of the instructor.

Readings/Online Course Resources

Readings and Online Course Resources are available on Blackboard Learn. You are encouraged to familiarize yourself with the appropriate materials prior to class, as this will facilitate your comprehension of course materials and assignments.

Activities

There will be weekly lab activities assigned to reinforce your understanding of the current classroom course material. These activities are intended to build your skills and continue your development in using common construction industry procedures.

Team Work

You will be assigned a team in lab. You are required to study and work in teams, but your course notebooks and lab reports will be submitted as individual work.

Course Notebook

You will be required to keep all lab assignments in a provided, tabbed binder. This course lab notebook will be graded and is a requirement for successful completion of the course.

J. Assessments:

Assessments are the basis of determining your ability to create, analyze, apply, and understand the Course Learning Outcomes (CLO) and Student Learning Outcomes (SLO) provided by ACCE. Instructional target goals for this course have been established and the results of the assessment in these areas will be used to determine the success of the student and instructor for this course.

Quizzes

Quizzes will be given based upon the class discussion, demonstrations, lab procedures, assigned readings, assignments, online course materials, and construction terms presented. A quiz may be given during any discussion or lab session. Quizzes may also be given on Bb Learn. Quizzes will be timed. While they are open book and open note, you will likely NOT have time to research the answers during the time allowed for the quiz. Quizzes are to be completed individually, i.e. they are not a team assignment. Do not solicit or give help to anyone taking a quiz.

Advisory Note!

There will be NO make-up quizzes, unless prior arrangements have been made. If you forget to take the quiz, do not come to the instructor after the fact. It is your responsibility to remember that a quiz is due. Quiz dates will be listed in the course announcements posted on Blackboard Learn.

Exams

There will be two mid-term exams and one final comprehensive exam. The final exam will cover the overall learning objectives and have comprehensive questions. Normally there will not be a make-up for anyone missing an exam. *If a student is unable to take an exam due to an emergency or illness, or is entitled to special dispensation the instructor should be notified in advance.* Non-excused absences will yield a score of zero. No makeup exams will be given, except for a serious and compelling reason as outlined by the University Catalog.

Participation, Attitude, and Attendance

A portion of your course grade will be based on participation, attitude, and attendance.

Advisory Note!

Attendance/Participation is documented for each class; this is a major consideration in determining your attendance/participation points. It's your responsibility to "sign in" for each class period. Please remind the instructor, if the roll sheet has not been distributed by the end class.

K. Grading/Evaluation:

Assignments: Problem Sets & Lab Notebook	40%
Exams & Quizzes	50%
Attendance and Participation	<u>10%</u>
	100%

Note: All late work including exams will have a maximum score of 70%, if it is accepted at all.

Grades are generally assigned by the following distribution, although the professor reserves the right to modify the distribution, as appropriate:

A	=	92 -100% (Exceptional)	C+	=	78 – 79% (Above Average)
A-	=	90 – 91% (Excellent)	C	=	72 – 77% (Average)
B+	=	88 – 89% (Very Good)	C-	=	70 – 71% (Below Average)
B	=	82 – 87% (Good)	D	=	60 – 69% (Inadequate)
B-	=	80 – 81% (Adequate)	F	=	< 60% (Failing)

L. Topical Outline

Refer to the course schedule attached and also posted on Blackboard Learn.

M. University Policies and Campus Resources

Academic Integrity

Students are expected to be familiar with the University's Academic Integrity Policy. Be familiar with the University's policy on academic honesty. The instructor takes this issue very seriously, and will not tolerate any form of dishonesty such as plagiarism or cheating. Your own commitment to learning, as evidenced by your enrollment at California State University, Chico, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Judicial Affairs. The policy on academic integrity and other resources related to student conduct can be found at: <http://www.csuchico.edu/sjd/sja.shtml>

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Students with disabilities requesting accommodations must register with the DSS Office (Disability Support Services) to establish a record of their disability.

Special accommodations for exams require ample notice to the testing office and must be submitted to the instructor well in advance of the exam date.

Student Computing

Computer labs for student use are available <http://www.csuchico.edu/stcp> located on the 1st floor of the Merriam Library Rm 116 and 450, Tehama Hall Rm.131 and the BMU Rm 301.

Student Services

Student services are designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. Students can find support for services such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. Student services information can be found at: <http://www.csuchico.edu/5.-studentservices.html>.

Disability Services

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please also contact the Disability Support Services office to coordinate reasonable accommodations for students with documented disabilities. Disabilities Support Services online: <http://www.csuchico.edu/dss/studentServices/>.

Student Learning Center

The mission of the Student Learning Center (SLC) is to provide services that will assist CSU, Chico students to become independent learners. The SLC prepares and supports students in their

college course work by offering a variety of programs and resources to meet student needs. The SLC facilitates the academic transition and retention of students from high schools and community colleges by providing study strategy information, content subject tutoring, and supplemental instruction. The SLC is online at <http://www.csuchico.edu/slc/>. The University Writing Center has been combined with the Student Learning Center.

N. Other

The instructor reserves the right to modify the contents of this syllabus at any time during the semester at the instructor's discretion.