Construction Management Department  
California State University, Chico  

CMGT 330 – Soil Mechanics, Concrete, and Construction Surveying  
Course Syllabus  

A. Prerequisites:  
CHEM 107, CMGT 210 (with a grade of C or higher), MATH 109 or MATH 120 (either with a grade of C- or higher), PHYS 202A.

B. Meeting Time & Location:  
- CMGT 330-1  Mo / We 11:00 AM - 11:50 AM  Langdon, Room 302  
- CMGT 330-2  Class #3051  Tu 8:00 AM – 10:50 AM  Langdon, Room 119  
- CMGT 330-3  Class #3073  We 8:00 AM – 10:50 AM  Langdon, Room 119  
- CMGT 330-4  Class #3085  Tu 11:00 AM – 1:50 PM  Langdon, Room 119  
- CMGT 330-5  Class #3090  Fr 8:00 AM – 10:50 AM  Langdon, Room 119

C. Instructor:  
Tyler Spangler  
Tspangler3@csuchico.edu  
Office Hours:  Monday & Wednesday 2:00pm – 4:00pm, Tuesday 2:00pm – 3:00pm  
Office Location:  O’Connell, Room 327  
Office Phone:  (530) 898-4505

D. Catalog Description:  
This course includes a study of the properties and behaviors of soils, aggregates, and concrete when used as construction materials. Introduction to concrete including mix design, slump tests, and compressive strength. Fundamentals of surveying including staking, layout, and elevation control.

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 applied the basic surveying techniques for construction layout and control [Direct Assessment: 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 presented information as it relates to soils and concrete.
**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](http://www.csuchico.edu/cm) and the SLO link under the 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 11 – Apply basic surveying techniques for construction layout and control. (DA).
- SLO 15 – Understand construction quality assurance and control. (R).

**ACCE Direct Assessment Mapping:**

<table>
<thead>
<tr>
<th>SLO</th>
<th>CLO</th>
<th>Assessment Type</th>
<th>Week</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>3</td>
<td>Lab 10-12, Final Exam</td>
<td>12-15</td>
<td>85% will earn 73% or better</td>
</tr>
</tbody>
</table>

**F. Course Resource Materials Requirements:**

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

**Laptop Computer:** A computer will be required for assigned activity work. There are no university-provided computers in the classroom.

**G. Course Requirements:**

**Conduct**

I believe 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, decisions, and consequences. I expect each of you to conduct yourself professionally and maturely, showing courtesy and respect for fellow students and the instructor. Please review the Universities Disruptive Behavior policy under section M of this document.

**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 pagers, phones, and other electronic devices (excluding laptops) is not permitted in class. If you must take a call (work or emergency), 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 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: Assigned materials and readings are to be read before attending class. Class discussions will be to refine and understand the content of the assigned readings. Your knowledge base, retention, and understanding of assigned readings will be assessed from submitted material, labs, quizzes, and exams.

Activities to be started in class (finished outside of class time as necessary), which are designed to reinforce the student's learning.

**I. Assignments:**
Students are expected to complete all assigned readings before attending class. Assignments are due at the beginning of class on the due date posted. 
Late assignments will be accepted at the discretion of the instructor and will be assessed a penalty as follows:

**UP TO 24 HRS LATE = 50% PENALTY**
**OVER 24 HRS LATE = NOT ACCEPTED**

Students are encouraged to make every attempt to fully understand the assigned materials before lectures and to come to class prepared to participate. Make the time to see me outside of class if you have any questions and/or do not understand a particular topic.

1. **Course Textbook/Readings** - Read weekly reading assignments provided in the latest course schedule posted before the lecture pertaining to the assignment.
2. **Homework Assignments** – Homework assignments will be assigned weekly throughout the semester and will be based primarily on weekly reading assignments in the textbook. Students will use Graphing paper (provided by CMGT Office) and Word document to record their answers and be responsible to transmit a typed hard copy of the assignment. Homework will be due by the beginning of class on the due date specified. Homework assignments point values will vary.
3. **Quizzes & In-Class Group Assignments** – Quizzes and in-class group assignments may vary depending on the lecture schedule. Students can expect a quiz/in-class each week on the information covered during the previous week’s lectures. No quizzes will be given on exam weeks. Quiz scores will vary.
4. **Course Labs and Notebook** – Students will be required to keep all lab assignments in the binder provided and tabbed. This course lab notebook will be graded and is required for the successful completion of the course.
5. **Extra Credit** – Maybe handed out by the professor for exceptional work.

*Note: You are encouraged to study and work in groups, however, all submitted work must be your original work.*
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 have been established (as noted above) 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, assigned readings, and construction terms presented. Quizzes will be given as posted on the course calendar. Quizzes will be taken in class and 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.

**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 me after the fact. It is your responsibility to remember that a quiz is due.

**Exams**

There will be one midterm exam, and one final exam is given during the semester to test your knowledge of the materials covered in lectures and the text. The midterm and final will cover material discussed in lectures and assignments. 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 and any event as soon as practical. Non-excused absences will yield a score of zero. No makeup exams will be given, except for serious and compelling reasons as outlined by the University Catalog at [http://catalog.csuchico.edu/viewer/14/ACAREGS.html](http://catalog.csuchico.edu/viewer/14/ACAREGS.html).

**Participation, Attitude, and Attendance**

Attendance and participation in each class are worth 5 points per day. The points will be registered in the grade book at the beginning of the semester. The attendance and participation points for each student will be adjusted downward 5 points for each day a student fails to attend and participated in any regularly scheduled class. A class roster will be posted at the front of the class for students to sign-in and verify attendance. It is the student’s responsibility to ensure they sign the class roster daily. There are no excused absences. If students should miss a class, students are responsible for any work assigned and all work covered. The class covers a substantial amount of material. Class attendance and participation during all sessions are expected and crucial to learning. Come to class prepared to participate in the lecture discussions.

**Advisory Note!**

- If an absence is to occur, the student must contact the professor before class starts.
K. Grading/Evaluation:
All point totals shown are approximate and subject to revision during the semester.

Assignments: Problem Sets 20%
Lab Notebook 30%
Exams & Quizzes 40%
Attendance and Participation 10%

100%

Grades are generally assigned by the following distribution, although the professor reserves the right to modify the distribution.

A = 94 -100% (Exceptional)  
A- = 90 – 93% (Excellent)  
B+ = 87 – 89% (Very Good)  
B = 83 – 86% (Good)  
B- = 80 – 82% (Adequate)  
C+ = 77 – 79% (Above Average)  
C = 70 – 76% (Average)  
D = 60 – 69% (Inadequate)  
F = < 60% (Failing)

L. Topical Outline:
Refer to the course work calendar posted on Blackboard Learn.

M. University Policies and Campus Resources:
Disruptive Behavior
Students are required to adhere to the behavior standards articulated in the Campus Policies and Code of Student Conduct, and to refrain from disrupting classes and other academic settings. "Disruptive behavior" means conduct that materially and substantially interferes with or obstructs the teaching or learning process in the context of a classroom or educational setting. Disruptive behavior includes conduct that distracts or intimidates others in a manner that interferes with instructional activities, fails to adhere to an instructor’s appropriate classroom rules or instructions, or interferes with the normal operations of the University. Disruption in the classroom may include:
• Persistent speaking without permission.
• Side conversations.
• Excessive talking.
• Engaging in activities not related to the class, or other overt inattentiveness including but not limited to sleeping, talking to others, doing work for another class, checking e-mail, and exploring the Internet.
• Ringing cell phones or using a cell phone.
• Using mobile devices or laptop computers in the classroom for non-course related purposes.
• Eating/drinking in class without permission.
• Monopolizing class discussion and refusing to defer to the instructor, or listen to others; persisting when the instructor has indicated that the student’s remarks are off-topic and it is time to move on.
• Chronically entering late/leaving early, moving about the classroom when not appropriate for the classroom activity.
• Filming, photographing, or taping the class without the instructor’s prior permission.
• Disputing authority or arguing with faculty and other students.
• Yelling, arguing, swearing, bullying, or other harassing or intimidating behavior.
- Inappropriate, disrespectful, or uncivil responses to the comments, opinions, presentations, etc. of others in the classroom.
- Physically or verbally abusive conduct.
- Failure to adhere to the instructor’s rules or instructions.
- Vulgar or obscene language, slurs, or other forms of intimidation.
- Threats of any kind.
- Improper use of equipment, materials, or resources.
- Destruction of property.
- Coming to class under the influence of alcohol or another controlled substance.
- Bringing individuals to the class who are not enrolled, including infants/children.
- Any behavior that puts the health or safety of the instructor or other students in the classroom in jeopardy.

**Academic integrity**

Students are expected to be familiar with the University's Academic Integrity Policy and the University's policy on academic honesty. I take this issue very seriously, and will not tolerate any form of dishonesty such as plagiarism or cheating. Your 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 the Student Judicial Affairs website.

**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. The policy for Disability access and Compliance are found [here](#).

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.

**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. Students with disabilities requesting accommodations must register with the ARC Office (Accessibility Resource Center) to establish a record of their disability.

**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 University Writing Center has been combined with the Student Learning Center.
N. Other:

**Title IX: Confidentiality and Mandatory Reporting**
As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as an instructor. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and our one-on-one meetings. I will seek to keep the information you share private to the greatest extent possible. **However, I am required to share information regarding sexual misconduct with the University.** Students may speak to someone confidentially by contacting the Counseling and Wellness Center or Safe Place.