

**Construction Management Department**  
**California State University, Chico**  
**CMGT 135 – Construction Materials & Systems**  
**Course Syllabus**

**A. Prerequisites**

None

**B. Meeting Time & Location**

CMGT 135-2      Class #3141      Mo / We 4:00PM - 5:15PM      O'Connell Center 124

**C. Instructor**

Scott McCutcheon      [samccutcheon@csuchico.edu](mailto:samccutcheon@csuchico.edu)  
Office Hours:      Monday and Wednesday 12:00 PM – 2:30 PM  
Office Location:      O'Connell 329  
Office Phone:      (530) 898-5216 (recommend cell phone see above)

**D. Catalog Description:**

A comprehensive study of the principal building materials and systems that are found in the construction industry. An in-depth review of how these materials and systems interact together to produce a complete design. The class highlights upon materials testing, quality control, green building products, and various project delivery methods.

**E. Course Learning Outcomes (CLO):**

**Upon successful completion of this course, the student will:**

1. Be conversant in the common construction materials, methods and systems in use across a wide range of applications. **[Introduce: ACCE-SLO #8]**
2. Have explored the basic principles behind construction quality assurance and control. **[Introduce: ACCE-SLO #15]**
3. Be familiar with some of the more common sustainable construction components being implemented in modern construction methods. **[Introduce: ACCE-SLO #18]**

**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 8 – Analyze methods, materials, and equipment used to construct projects. (I).
- SLO 15 - Understand construction quality assurance and control (I).
- SLO 18 - Understand the basic principles of sustainable construction. (I).

**F. Course Resource Materials Requirements:**

Textbook: Construction Materials, Methods, & Techniques (4<sup>th</sup> Ed.) W.D. Spence & E. Kultermann  
Handouts: Various Sources (to be posted on Blackboard Learn)

## **G. Course Requirements:**

### **Conduct**

You are an adult and will be treated and respected as an adult. Students are expected to conduct themselves properly in a mature manner, showing courtesy and respect for fellow students and the instructor. Disruptive or annoying behavior, outbursts, unbecoming language, or personal visiting during class time will be grounds for disciplinary action. Discipline problems will not be tolerated.

### **Honesty in the Classroom**

Ethical standards established by the university will be strictly upheld (see the University Catalog)

### **Tobacco Products**

On August 17<sup>th</sup>, 2017, Chico State will become a tobacco free campus. For more information about the policy see: <http://www.csuchico.edu/announcements-campus/announcements/current/smoking-tobacco-reminder.shtml>

### **Electronic Devices**

The use of cell phones, tablets, MP3 players and 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. Student's failing to follow appropriate withdrawal protocols will be solely responsible for the grade earned.

### **Professional Work**

As a student looking towards beginning a rewarding career 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 or client. Work deemed unprofessional by the instructor will not be accepted for consideration of a grade.

## **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 prior to 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, quizzes, and exams.

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

## **I. Assignments:**

Students are expected to complete all assigned reading prior to 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 = 10% PENALTY**

**OVER 24 to 48 HRS LATE = 25% PENALTY**

**OVER 48 to 72 HRS LATE = 50% PENALTY**

**OVER 72 HRS LATE= NOT ACCEPTED**

Students are encouraged to make every attempt to fully understand the assigned materials prior to 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 prior to the lecture pertaining to the assignment.
2. **Lectures** – The class will be presented as a series of class lectures, discussions and work groups. Lectures will be aided by the use of PowerPoint. PowerPoint lesson plans presented in class will be posted on the Blackboard Learn Portal for the student’s use.
3. **Homework Assignments** – Homework assignments will be assigned weekly throughout the semester and will be based primarily on weekly reading assignments in the textbook. The homework assignment and related due date will be posted in a weekly *Learning Module* as a Word document under the *Coursework* content tab (left hand column of tasks in the Blackboard Learn Portal for the course). Students will use the Word document to record their answers below the questions given 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 varies.
4. **Quizzes & In-Class Group Assignments**– Quizzes and in-class group assignments may vary depending on the lecture schedule. Students can expect a quiz the first class of each week on the information covered during the previous week’s lectures. No quizzes will be given on exam weeks. Quiz scores will vary.
5. **Bi-Weekly Jobsite Observation Report Logs** – Students will record observations of a construction activity on a Bi-Weekly Jobsite Observation Report form (provided). Students will provide information regarding 1) the construction activity observed; 2) notations of materials being used in the activity observed; 3) the building component or system material(s) installed; 4) labor observed and a description of the work being performed by the labor; 5) equipment and tools being used if any; and 6) a description of any building products or technologies observed such as curing compounds, de-watering, scaffolding, rigging, etc. if applicable. ***Students are not expected to access construction sites, but to observe the sites from an allowable distance.*** The site observations are intended to reinforce subjects covered in the text and lectures. The Bi-Weekly Jobsite Observation Report forms will be posted in a weekly *Learning Module* as a Word document under the *Coursework* content tab throughout the semester and posted under a *Forms* folder in the *Resource* content tab. Students will be responsible to transmit a hand written hard copy of their Bi-Weekly Jobsite Observation Report every two weeks for a total of seven (7) reports during the semester. The report does not need to be typed. In fact, it is expected the reports will be hand written in the field during the student’s observation. The due dates will be posted under the weekly *Learning Module* for each report. Each report will be worth 15 points. *Bi-Weekly Jobsite Observation Reports will not be accepted on late submission.* The following scoring rubric will be used:

<b>Bi-Weekly Jobsite Observation Report Scoring Rubric</b>	
Student name, date, jobsite and jobsite location, weather / temperature information	2
Construction activity detailed and related CSI number	2
Detailed description of components and building system observed	5
Labor observed and related activity description	2
Materials observed and description of how material is being utilized	2
Equipment and/or tools observed and description of how utilized	2
<b>Total Points</b>	<b>15</b>

6. **Take-Off Assignments** – Students will be assigned two material take-offs during the semester. The take-offs will correspond with concrete or lumber lesson plans, homework assignments and quizzes. The take-off assignments will be worth 20 points each.
7. **Scavenger Hunt** – Students will be required to perform a scavenger hunt related to the course during the semester. The scavenger hunt will be random and in addition to the homework and take-off assignments. The Scavenger Hunt will be worth 20 points.
8. **CSI Master Format** – The industry utilizes a standard format for organizing construction specifications, cost accounting and other systems. This standard format is called Master Format and is prepared by the Construction Specification Institute (CSI). Students will be required to learn 23 divisions of the CSI Master Format. The Midterm and Final Exams will have matching questions that will test the students’ knowledge and understanding of the CSI Master Format. *The CSI Master Format* is posted under a *Forms* folder in the *Resource* content tab *for student’s use.*

**9. Course Resource Notebook** – A Course Resource Notebook requirement will be a part of the student’s grade in this class. It is important for future construction leaders to develop effective organizational management habits. Student practices in construction management classes will carry over to their industry job assignments upon graduation. Students should constantly strive to organize themselves and their work in a manner that will assist them in the development of effective and professional management practices. In an effort to steer student into developing these good practice, students will be required to maintain a three ring binder. The binder shall be minimally set-up in accordance with the scoring rubric below and organized utilizing the following eight (8) index tabs:

- i. Homework
- ii. Quizzes
- iii. Bi-Weekly Jobsite Observation Reports
- iv. Lecture Notes
- v. Exams
- vi. Construction Glossary of Terms

The binder’s content will be provided during the instruction and can be found on the Blackboard Learn Portal for the class. A Construction Glossary of Terms can be obtained through URL links found on the Blackboard Learn Portal.

The following scoring rubric will be used to establish the student’s notebook grade:

<b>Resource Notebook Scoring Rubric</b>	
Binder provided with clear plastic cover for inserting cover page. Binder cover page is entitled “CMGT 135 Construction Materials and Systems Resource Binder” and includes a professional industry graphic, class section number, semester, and student’s name.	10
Eight (8) tabs and a Table of Contents are provided. Tabs and table ordered as per the Syllabus requirements.	5
Class materials are organized within tabs.	5
<b>Total Points</b>	<b>20</b>

Failure to follow the Scoring Rubric requirements will result in a loss of corresponding points. The Course Resource Notebook will be reviewed and graded during the Final. The notebook will be worth a total combined score of 20 points as noted above.

<b>Evaluation and Grading Scale</b>	
Class Resource Notebook	20
Bi-Weekly Building Systems Site Evaluation Logs	105
Homework Assignments	155
Take-Offs	40
Quizzes & In-Class Group Assignments	140
Attendance & Participation (29 classes @ 5 points per class)	145
Scavenger Hunt	20
Midterm Exams (Midterm Nos. 1 – 125 pts. & 2 – 90 pts.)	215
Final Exam	160
<b>Total Maximum Points***</b>	<b>1000</b>
<i>***All point values &amp; listed assignments are subject to change at the sole discretion of the instructor. The items listed above are for reference only.</i>	

*Note: You are encourage to study and work in groups, however all submitted work must be your own original work.*

## **J. Assessments:**

### **EXAMS**

There will be two Midterm exams, and one final exam given during the semester to test your knowledge of the materials covered in lectures and the text. The midterms 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 in 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>. The final exam will be non-cumulative.

## **CLASS ATTENDANCE AND PARTICIPATION**

Attendance and participation in each class is worth 5 points per day for a total of 145 points. The 145 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 is expected and crucial to learning. Come to class prepared to participate in the lecture discussions. Take your jobsite evaluations, homework assignments, scavenger hunt, and quizzes seriously. These lessons will help students gauge if they comprehend the work.

## **K. Grading/Evaluation**

All point totals shown are approximate and subject to revision during the course of the semester. Grades are generally assigned by the following distribution, although the professor reserves the right to modify the distribution. Grades will be assigned based on the following scale:

A = 94%	C+ = 78%
A- = 90%	C = 74%
B+ = 88%	C- = 70%
B = 84%	D = 60%
B- = 80%	F = ≤ 59%

*Instructor Bonus Points* – The instructor reserves the right to increase a student's final cumulative grade by up to 30 points for quality class participation. Instructor Bonus Points will be used at the instructor's discretion to reward students who turn-in all work and assignments on dates due, take all quizzes and exams as scheduled, and miss no regularly scheduled classes.

## **L. Topical Outline**

The course work calendar is posted on Blackboard Learn. The calendar serves as a **tentative guide** for planned classroom activities, and exams. Related reading assignments are noted if known at the time the schedule is posted. Be prepared. Read weekly course resource reading assignment(s) for lectures and labs as assigned and/or refer to any referenced course resources prior to the lectures pertaining to the assignment.

Interteach/group, and individual assignments will be scheduled as noted or during the course of the semester.

## **M. University Policies and Campus Resources**

### **a. 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 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 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.

**b. 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 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/prs/EMs/2004/04-036.shtml>

**c. 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 ARC Office (Accessibility Resource Center) <http://www.csuchico.edu/prs/EMs/2005/05-019.shtml> 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.

**d. Student Computing**

Computer labs for student use are available <http://www.csuchico.edu/prs/EMs/2007/07-001.shtml> located on the 1st floor of the Merriam Library Rm 116 and 450, Tehama Hall Rm.131 and the BMU Rm 301.

**e. 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://rce.csuchico.edu/alci/student-services>

**f. 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 Accessibility Resource Center office to coordinate reasonable accommodations for students with documented disabilities. Accessibility Resource Center online: <http://www.csuchico.edu/arc/instructors/support-services.shtml>

**g. 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.