A. **Prerequisites**

CMGT 450 – Construction Estimating

B. **Meeting Time & Location**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Class Code</th>
<th>Days/Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGT 455-01</td>
<td>Class #2775-DIS</td>
<td>Tuesday 4:00 PM – 5:50 PM</td>
<td>Langdon 200</td>
</tr>
<tr>
<td>CMGT 455-02</td>
<td>Class #2800-LAB</td>
<td>Thursday 4:00 PM – 5:50 PM</td>
<td>Langdon 200</td>
</tr>
<tr>
<td>CMGT 455-03</td>
<td>Class #5150-DIS</td>
<td>Tuesday 2:00 PM – 3:50 PM</td>
<td>OCNL 127</td>
</tr>
<tr>
<td>CMGT 455-04</td>
<td>Class #5151-LAB</td>
<td>Thursday 2:00 PM – 3:50 PM</td>
<td>OCNL 127</td>
</tr>
</tbody>
</table>

C. **Instructor**

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

D. **Catalog Description:**

Construction cost monitoring and analysis instruments that are developed from the project estimate. These include budgets, billing instruments, and scheduling data. Also included will be the development of overhead allocation systems.

The accurate recording and monitoring of costs is essential to the determination of whether costs are running higher or lower than estimated. The most astute contractor can do nothing about excess costs after the job is finished, but if they can identify cost overruns when they occur during the project, the contractor may be able to prevent financial disaster.

CMGT 455 Construction Cost Management is designed to provide students with opportunities to develop and understand construction cost monitoring and analysis instruments developed from the project estimate. Instruments used include, but are not limited to, cost control and production monitoring systems, billing instruments, and scheduling data.

The course is presented and organized in such a way that it emphasizes the practical aspects of construction cost management and provides techniques and systems used to manage a construction company’s costs, revenues, and overhead allocation. The course objectives are accomplished through the use of an estimate prepared in the prerequisite class, which contains the costs of a construction project including direct, indirect, and contingency and profits.

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

_Upon successful completion of this course, the student will:_

1. Understand the basic elements of cost control **[Assess: ACCE-SLO #16]**
2. Incorporate cost control elements into functioning control systems, illustrating their benefit to the successful management of construction projects.
3. Utilize spreadsheet software to translate the Project Estimate into an effective cost control budget and cost control document.
4. Understand simple construction accounting operations. [Assess: ACCE-SLO #14]
5. Utilize spreadsheet software to translate the Project Budget to a project unit cost schedule of values for effective project progress billing functions.
6. Understand how Quality Assurance and Quality Control are linked to the overall health of a construction project. Reinforce the relationship between good quality and project performance. [Assess: ACCE-SLO #15]
7. Develop various instruments of communication and data collection/storage used throughout the construction cost management process including but not limited to: Budgets, Purchase Orders, Scopes of Work, Time Cards/Daily Logs, Subcontracts, Schedule of Values (Unit Price and Lump Sum), Forecasts, and Project Breakdowns and Overviews [Reinforce: ACCE-SLO #1]

**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 Management’s 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 1 – Create written communications appropriate to the construction discipline (R).
- SLO 14 - Understand construction accounting and cost control (DA).
- SLO 15 - Understand construction quality assurance and control (DA).
- SLO 16 - Understand construction project control processes (DA).

**ACCE Direct Assessment Mapping:**

<table>
<thead>
<tr>
<th>SLO</th>
<th>CLO</th>
<th>Assessment Type</th>
<th>When</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>4</td>
<td>QUIZ</td>
<td>#3</td>
<td>70% will earn 70% or better</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>QUIZ</td>
<td>#5</td>
<td>70% will earn 70% or better</td>
</tr>
<tr>
<td>16</td>
<td>1,2,3</td>
<td>QUIZ</td>
<td>#2</td>
<td>70% will earn 70% or better</td>
</tr>
</tbody>
</table>

**F. COURSE RESOURCE MATERIALS REQUIREMENTS**
There is no required textbook.

Student’s CMGT 450 High Tech Training Center Project Estimate will be the basis for the development of a Project Budget, Planned-Against-Actual Spreadsheet, Schedule of Values, Subcontracts and Purchase Orders for this course.

Required selected reading, recommended references and websites including construction dictionaries, spreadsheet formats, contract forms, contract bond guidelines, and regulatory information sources will be posted, cited, and/or linked in the Blackboard Learn Portal for the course.

**G. COURSE REQUIREMENTS**

**Conduct:**
Students are adults and will be treated and respected as an adult. Students are 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)

Electronic Devices:
The use of any electronic devices is not permitted in class. Turn off all devices prior to the start of class.

Tobacco Products:
The use of any type of tobacco product (smokeless, chewable or otherwise) is not permitted in any building at CSU, Chico.

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

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.

H. INSTRUCTIONAL METHODS

Course Textbook and Resource Materials
There is no required textbook. The Project Estimate developed in CMGT 450 Construction Estimating is required and will be the project estimate used to develop class requirements. Read weekly course resource reading assignment(s) for lecture and labs as assigned and refer to any referenced course resources prior to the lectures that pertain to the assignment.

Presentation of Course Material
The class will be presented as a series of class lectures, discussions and work groups. Lectures will be aided by the use of PowerPoint presentations, quizzes, individual assignments, and Interteach group exercises. Any PowerPoint lectures presented will be posted on the Blackboard Learn Portal for the course.

I. ASSIGNMENTS

Interteach Group Assignments
Students will be assigned to an Interteach Group by the Instructor. Students are expected to review and study assigned Interteach Preparation Guides as required to come to class prepared to participate within their assigned group and complete a graded Interteach assignment during the lecture portion of the class. Interteach materials will be assigned a week in advance unless otherwise noted. Students will be graded as a group. Students will be graded individually on their preparedness and participation. Each member of an Interteach group will be assessed and evaluated at the end of the semester by the instructor and the other members of their group anonymously on their participation and preparedness. Students evaluated poorly will have their attendance and participation points reduced. The adjustment of points will be at the discretion of the instructor. Interteach assignments are worth 1 point each.

Writing
As part of the capstone designation of this course, students are expected to illustrate their proficiency in written communication. Writing assignments will be assigned during class time as part of a group assignment, individually, or as part of the Lab assignments during the activity period.
Individual Assignments
Throughout the semester there will be individual assignments given. The assignments may take the form of an opinion paper, research paper, or other mechanism to illustrate a student’s particular knowledge on a subject.

Lab Assignments
Lab assignments will be handed out in a hard copy format and posted under a Lab content tab in a Lab Learning Module for the week on the Blackboard Learn Portal for the course. Lab instructions will be given regarding lab deliverables, procedures, formatting and scoring. All assignments will be transmitted to the instructor utilizing a standard transmittal provided for the class. Student collaboration and peer teaching is encouraged during labs. However, the lab assignments are to be student’s individual work. Collaborate to gain a better understanding, but do your own work. Students turning in duplicate assignments will receive no credit for their work. Students will not leave early upon completion of their assignments. Students instead are expected to assist and collaborate with other students. When one leaves lab, we all will leave the lab.

Homework
Minimal to no homework will be assigned in consideration of the amount of class time set aside for work in labs. Additional homework may be assigned at the instructor’s discretion should students not take advantage of utilizing the assigned lab time allotted for assignments and related learning.

J. ASSESSMENTS

Quizzes
Throughout the semester there will be quizzes given. The quizzes are indicated on the course schedule. Additional quizzes may be announced at the instructor’s discretion. The point value for the quizzes will vary (10-20 pts).

Individual Assignments
As noted, there will be individual assignments given. The assignments are indicated on the course schedule. Additional assignments may be required and introduced at the instructor’s discretion. The point value for the assignments will vary (10-50 pts).

Midterm Exam
There will be one (1) two-hour Midterm Exam given during the semester to test your knowledge of the instruction covered in lectures, Interteach group assignments and Lab coursework. The written portion of the Midterm Exam will consist of True and False, multiple choice and matching questions as well as problem sets. A make-up exam will be given only for students who must miss the exam due to a serious and compelling reason as outlined by THE UNIVERSITY CATALOG.

Term Project
In lieu of a final exam, a term project will be assigned. The term project will consist of a research paper. The term project will incorporate elements of the entire coursework and will require periodic research throughout the term. Some class and lab time will be set aside to collaborate with other students and the instructor to ensure successful progression of the project, and to discuss and introduce new elements. However, the majority of the term project must be completed on the student’s own time. The term project will be introduced in the second week of semester. A short presentation of the term project will be required as part of the assignment. Presentations will take place during finals week.

Class Attendance and Participation
Class and lab attendance and participation are worth five (5) points each respectively per week. A class roster will be available in each class and lab for students to sign-in verifying attendance. It
will be the student’s responsibility to ensure they sign the class roster daily. Five (5) points will be deducted for each absence. If a student misses a class, the student is responsible for any work assigned and all work covered.

Class and lab participation during each session is expected and crucial to learning. The class and labs will cover a lot of material each week. Students are encouraged to make every attempt to fully understand the assigned materials prior to lectures and lab and to come prepared to participate. Students are further encouraged to take the time to see their instructor should they have any questions and/or do not understand a particular topic.

The participation points per class will also be adjusted downward (at the discretion of the instructor) should a student fail to come to class prepared and participate. The instructor reserves the right to increase a student’s final course grade for quality class participation. Quality participation shall be defined as missing no assigned classes and turning in all assigned work complete and on time.

K. GRADING/EVALUATION:
During the Fall 2016 semester, you will have the opportunity to earn 1,000 points. Points are earned as follows:

<table>
<thead>
<tr>
<th></th>
<th>Lecture/Lab Attendance &amp; Participation</th>
<th>Lab Assignments</th>
<th>Interteach/Assignments/Quizzes</th>
<th>Midterm Exam</th>
<th>Term Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>(30 meetings @ 5 points per class)</td>
<td>(11 EA @ 20-60 points per Lab)</td>
<td>(Varies)</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Maximum Points 1,000

Grades will be assigned based on the following scale:

- A = 940+
- A- = 900+
- B+ = 880+
- B = 840+
- B- = 800+
- C+ = 780+
- C = 740+
- C- = 700+
- D = 600+
- F = ≤599

No curve will be used. Student grades will be reflective of their efforts, participation and achievements. All projects are due on the assigned due date.

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
- 24 to 48 HRS LATE = 25% PENALTY
- 48 to 72 HRS LATE = 50% PENALTY
- OVER 72 HRS LATE = NOT ACCEPTED

L. TOPICAL OUTLINE
The course work calendar is posted on Blackboard Learn. The calendar serves as a tentative guide for planned classroom and lab activities, and exams. Related reading assignments are noted if known at the time the schedule was prepared. Be prepared. Read weekly course resource reading


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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

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.

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](http://www.csuchico.edu/prs/EMs/2004/04-036.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 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.

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.

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

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.

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
Title IX: Confidentiality and Mandatory Reporting
As a Chico State instructor, one of my responsibilities is to help create a safe learning environment for Chico State students. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep 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 (898-6345) or Safe Place (898-3030). Information about campus reporting obligations and other Title IX related resources are available here: http://www.csuchico.edu/title-ix.