

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

**CMGT 360 – Construction Project Management
Course Syllabus**

A. Prerequisites

ACCT 201, ENGL 130, MATH 120, PHYS 202A, CMGT 135, CMGT 210

B. Meeting Time & Location

CMGT 360-01	Class #3100	T/TH	2:00 PM – 3:15 PM	OCNL 123
CMGT 360-02	Class #3134	T/TH	3:30 PM – 4:45 AM	SSKU 120
CMGT 360-03	Class #5529	T/TH	12:30 PM – 1:45 PM	OCNL 131

C. Instructor

Patrick Brittle Email: TBD
Office Hours: TBD, or b Appointment
Office Location: Langdon 100

D. Catalog Description:

This course introduces students to the life cycle of a construction project from conception through completion and commissioning. Students are given an overview and practice of construction management theory, project feasibility processes and real estate development, pre-construction, delivery methods and pricing systems, procurement, project administration, project closeout and commissioning. Students develop project management skills necessary to prepare them to lead a multidisciplinary team in diverse environments while balancing conflicting constraints of the project's defined scope, quality, budget, and time.

Upon completion of the course, students shall have the skills and knowledge necessary to understand and select delivery and pricing systems, and prepare them to manage, coordinate, and supervise the construction process within the constraints of the project's defined scope, time schedule, budgeted costs, and intended design. The course places an emphasis on the fundamentals of integrated project delivery and more specifically, the fundamentals and principles of Design-Build and Design-Build Project Management. The course's integrated project delivery study is approved by the Design-Build Institute of America (DBIA) and meets their University Program curriculum requirements for certifications. DBIA related curriculum is developed to give graduating students a "jump start" toward becoming a designated *Design-Build Associate Professional* by providing students the opportunity to receive Certificates of Completion for 2 of the 4 core courses required to earn credit for future professional designation as an *Associate DBIA Professional*.

E. Course Learning Outcomes (CLO):

Upon successful completion of this course, the student will be able to:

1. Apply construction management skills as an effective member of a multi-disciplinary team.
(Reinforce: ACCE-SLO #9)
2. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process. **(Assess: ACCE-SLO #12)**
3. Analyze construction documents for planning and management of the construction process.
4. Write scopes of work, contracts, Notices to Proceed, Change Orders, Request for Information, Transmittals, develop Schedule of Values, and process Applications for Payment. Understand

- public/private procurement processes, documentation and public force accounts. Fully understand the concept of building commissioning. **(Reinforce: ACCE-SLO #1)**
5. Understand construction quality assurance and control and know the concept of Total Quality Management (TQM) and the general responsibilities for construction Safety and Health.
 6. Be familiar with contract pricing methods to include *Negotiated, Sole Source, Lump Sum, Unit Price, Cost Plus, Guarantee Maximum Price*, and have an understanding of contract procurement management for all delivery systems. **(Assess: ACCE-SLO #12)**
 7. Analyze professional decisions based on ethical principles **(Reinforce: ACCE-SLO #6)**
 8. Create a project specific safety plan, including site utilization, job hazard analysis, and tool box meetings **(Assess: ACCE SLO #3).**

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:

- SLO1 – Create written communications appropriate to the construction discipline (R).
- SLO 2 – Create oral presentations appropriate to the construction discipline (R).
- SLO 3 – Create a construction project safety plan (DA).
- SLO 6 – Analyze professional decisions based on ethical principles (R).
- SLO 9 – Apply construction management skills as an effective member of a multi-disciplinary team (R).
- SLO 12 – Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process (DA).
- SLO 13 – Understand construction risk management (R).
- SLO 17 – Understand the legal implications of contract, common, and regulatory law to manage a construction project (R).

ACCE Assessment Mapping:

<u>SLO</u>	<u>Assessment Type</u>	<u>Target</u>
3	Safety & IIPP Written Assignment	70% will earn “70%” or better
8	Homework No. 6	70% will earn “70%” or better
9	Out-of-Class Lab	70% will earn “70%” or better -Presentation 70% will earn “70%” or better - Written
12	Quiz Nos. 3, 4, 9	70% will earn “70%” or better
	Homework Nos. 4, 7,8	70% will earn “70%” or better
	Midterm No. 2	70% will earn “70%” or better
	Delivery Systems White Paper	70% will earn “70%” or better

F. Course Resource Materials Requirements:

Textbook: There is no required textbook for this class. All necessary resource materials are posted on Blackboard-Learn on the Campus portal (portal.csuchico.edu)

Course Pack: The CMGT 360 Course Pack is posted on Blackboard-Learn

G. Course Requirements:

Participation, Attitude, and Attendance:

Attendance and participation in each class is worth 5 points per day for a total of 150 points. The 150 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 provided each day 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.

Class participation during each session is expected and crucial to learning. Come to class prepared and willing to participate in lecture discussions. Take homework and document assignments, quizzes, discussions, and out-of-class laboratory work seriously. These requirements reinforce the course objectives and help students gauge their comprehension of the work. The instructor reserves the right to increase a student's final course grade by up to 20 points for quality class participation.

Written Communication

This is a writing intensive course. As such, students will have the opportunity to improve their writing skills using industry standard letters and Notices to Proceed, drafting scopes of work and related contract agreements, preparation of Safety and Injury Illness Prevention Plans, and writing short and in depth white papers on topics related to construction industry practice. By submitting a series of drafts before submission, students will receive feedback from their peers and/or instructor before submitting their final papers. Scoring rubrics will be provided for assignments given. Written communication assignments account for 25% of student's grade.

Course Resource Notebook:

It is important for future construction leaders to develop effective organizational management habits. Student practices in their construction management classes will carry over to the workplace 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. A three ring binder *Course Resource Notebook* requirement will be a part of the student's grade in this class. The instructor will furnish the binder and tabs to the students.

The notebook shall be set-up in accordance with the scoring rubric and organized utilizing the following ten (10) index tabs:

1. Syllabus
2. Homework
3. Quizzes
4. Written Assignments
5. Interteaches
6. Notes/Lesson Plans
7. Out-of-Class Lab
8. Midterm & Final Exams
9. Construction Management Glossary of Terms
10. 2004 CSI Master Format

The 2004 CSI Master Format and Construction Management Glossary of Terms reference materials can be obtained through URL links found on the Blackboard Learn Portal for the class. The following scoring rubric will be used to establish the student's notebook grade:

Resource Notebook Scoring Rubric	
<u>Requirements</u>	<u>Points</u>
Binder is submitted with clear plastic cover for inserting cover page Binder cover page is entitled "CMGT 360 Construction Contracting Systems Resource Binder" and includes 1) a professional industry Graphic; 2) class section number; 3) semester; and 4) student's name.	10
Ten (10) tabs and a table of Contents are provided. Tabs and table are ordered as per the Syllabus requirements	<u>10</u>
Total Points	<u>20</u>

Failure to follow the scoring rubric requirements will result in a loss of points. *Course Resource Notebooks will be reviewed and graded for compliance with the requirements at the end of the first Midterm Exam.*

Conduct

All students are adults and will be treated and respected as such. This means that you will be held accountable for your actions, decisions, and their consequences. Each of you has to conduct yourself in a professional and mature manner, showing courtesy and respect for fellow students and the instructor. **During class time NO unprofessional behavior will be tolerated.**

1. Honesty in the Classroom

You are expected to be familiar with the University's policy on academic integrity. As such, there is 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).

2. Tobacco Products

The use of any type of tobacco product including smokeless, chewable or otherwise is not permitted in any building at California State University, Chico.

3. Electronic Devices

The use of pagers, phones, MP3 players 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.

4. Withdrawal from Class

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

5. 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 below listed 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 started in class (finished outside of class time as necessary) are designed to reinforce the students learning understanding.

CMGT 360 Course Packet Appendix of Resource Materials:

The course will rely on readings and resources from a course packet and Blackboard Learn Portal postings. Review weekly course packet reading assignment(s) and/or refer to any referenced course packet appendix material(s) prior to the lecture pertaining to the assignment. **Students are expected to complete all assigned reading prior to attending class.**

Lectures:

The class will be presented as a series of class lectures, discussions and peer work group 'Interteaches'. Lectures will be aided by the use of PowerPoint. PowerPoint lecture handouts will be posted on the Blackboard Learn Portal for the student's use during each lecture.

Design-Build Institute of America (DBIA) University Certification Program:

DBIA has an extensive Design-Build Professional certification program that provides professionals the opportunity to be certified and earn a *Design Build Professional* designation. Parts of the DBIA Professional certification curriculum have been integrated into this course. Students will be given the opportunity during the semester to earn *Certificates of Completion* for 2 of the 4 core courses required by the DBIA to become certified and earn a DB Associate Professional designation. Midterm No. 2 is dedicated to DBIA Fundamentals of Project Delivery course certification material. The Final Exam is dedicated to DBIA Principles of Design-Build course certification material. Students are required to achieve a grade of 80% or higher on each of the respective designated exams and 80% or higher overall in the class to "qualify" for DBIA Certificates of Completion in each of the respective DBIA related exams. Certificates of Completion earned will be applied toward potential future designation as an *Associate DBIA Professional*. Successful students will be issued a "pending designation" in DBIA's national database.

Interteach Assignments:

Several of the lectures will be "flipped" requiring students to review the PowerPoint lectures and other required reading prior to coming to class and then participate during the lecture period in graded interactive peer exercises without any prior instruction.

I. Assignments:

Students are expected to complete all assigned reading prior to attending class. Assignments are due at the beginning of class on the front table on the due date posted. ***Assignments turned in late will not be accepted for consideration of a grade.*** Students are encouraged to make every attempt to fully understand the assigned materials prior to lectures and to come to class prepared to participate. Students are encouraged to meet with their instructor should they have any questions and/or do not understand a particular topic. Make the time to see me outside of class if you have any questions and/or do not understand a particular topic.

Homework Assignments:

Homework will be assigned throughout the semester. Students can expect an assignment each week with exception of exam weeks. Each homework assignment and related due date will be

posted on the student's Blackboard Learn Portal in a weekly learning module found under the "Lessons" content tab for the course. The homework assignment will be posted as a Word document in the learning module for the week ("Week No. 1" is a folder under the "Lessons" content tab). Homework assignments will not be turned in via the Blackboard Learn Portal for the course. Hard copies of homework assignment will be turned in at the beginning of class on the date due. All assignments will be transmitted to the instructor for grading utilizing a transmittal form provided. Forms for the course can be found in a *Forms* folder under the *Resource content tab* in the student's Blackboard Learn Portal. Homework points will vary.

Interteach Assignments:

Students will be assigned to Interteach groups of four during the first week of the course. Students will be expected to review and study assigned Interteach materials as required to come to class prepared to participate within their assigned group and complete a graded Interteach assignment. Each member of an Interteach group will be assessed and evaluated on their participation and preparedness by the instructor during class and by other members of their group anonymously at the end of the semester. Students evaluated poorly will have their attendance and participation points reduced up to 30 points at the discretion of the instructor. Interteach assignments are worth 15 points each.

Written Document Assignment:

Students will be introduced to various project management practices and related construction documents used to administer, mobilize and manage construction projects throughout the semester. Students will be given instruction on the use of these documents and then prepare them for grading.

Delivery & Pricing Systems White Paper Written Assignment

The objective of this assignment is for students to evaluate the Owner's criteria given in this assignment and other relevant information you have learned in class and make recommendations listed below to an Owner in the form of a two-page construction industry report known as a white paper. White papers enable companies to educate, which is a white paper's first priority, while offering a subtle persuasive element, recommendation for this assignment.

Safety & IIPP Plans Written Assignment

For this assignment, student will use the information provided in lecture, sample documents posted on Blackboard Learn under this assignment, and their own resources to aide them in the development of a Safety and Health Plan Handbook and Injury and Illness Prevention Plan for the construction industry. The objective of this assignment is for students to do work on their own and create the both plans for a fictitious construction company of their choosing.

Out-of-Class Laboratory Design-Build Practicum – Written and Oral Presentation:

The class will be given the opportunity to practice their academic learning using real-life exercises during the last eight weeks of the semester. It is important for future construction leaders to be given opportunities to assimilate learning and to experience leadership firsthand. The instructor will divide students into teams of 4 to 5 depending on the class enrollment. Students will be asked to submit resumes for the purpose of assigning balanced teams. Pre-determined team assignments will provide relevant exercises that reinforce the course objectives. Students will practice their CMGT 360 academic learning by researching and presenting a Design-Build related subject. Individual teams will deliver their projects to the class in the form of a traditional presentation, debate, or team panel. An opinion paper, white paper or research report will be submitted to the instructor on the last day of class. Teams will create agendas to facilitate their team meetings and submit their agendas and separate meeting

minutes with their written papers. The team grade for the report and presentation will be the grade the students in the team will receive individually. Any team who feels a team member is not carrying their weight will be given the opportunity to submit to the instructor a request to remove the team member. The request will be mediated, and depending on the circumstances, the team member will be given a brief remediation plan or be removed immediately from the team by the instructor. Team members removed from their team will be required to submit a written paper/report on their own, but will not present and lose the 100 oral presentation points.

2004 CSI Master Format:

The first Midterm Exam will have 23 matching questions requiring students to know the 2004 CSI MasterFormat. Students are required to know Divisions Nos. 00 through 14, 21, 22, 23, 26, 27, 31, 32 and 33. The 2004 CSI Master Format can be found in the forms folder under the Resource content tab in the student's Blackboard Learn Portal.

Group Work:

You are encouraged to study and work in groups, however all submitted work must be your own original work. DO NOT SHARE YOUR WORK WHEN YOU WORK TOGETHER, SHARE YOUR UNDERSTANDING OF THE MATERIAL.

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.

Final and Midterms:

There will be two (2) Midterms exams and one (1) Final exam given during the semester to test student's knowledge of the instruction covered in lectures, assignments, discussions and course packet material. The exams will consist of True and False, multiple choice, matching and fill-in-the-blank questions.

The first Midterm will cover the theory of project management and the life cycle of a project to include project team members, planning and development, delivery systems, preconstruction, procurement, construction administration and project management, and quality control, safety and commissioning. The second Midterm will cover delivery systems and focus of the fundamentals of the design-build and will also be the first Design Build Institute of America (DBIA) certification exam.

The Final Exam will be given on the last class of the semester and will cover in depth the principles of design-build project management. This will be the second DBIA certification exam as well. Out-of-Class Laboratory design-build oral presentations will be presented during Finals week. Finals week participation is mandatory and represents 200 overall points for both the written and oral presentation portions of the Out-of-Class Lab assignment.

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>.

Quizzes:

Students can expect a quiz to be given the first class of each week. Quizzes will be on the information covered during the previous week's lectures, Inter-teaches and homework. Quizzes will not be given on exam weeks. Quiz points will vary. **There will be NO make-up quizzes, unless prior arrangements have been made.**

K. Grading/Evaluation:

Students will have the opportunity to earn 1,245 points. Points are earned as follows:

(A) Homework Assignments	185
(B) Quizzes	180
(C) Inter-teaches (3 @ 15 points each)	45
(D) Class Written Assignments	135
(E) Course Resource Binder	20
(F) Attendance & Participation (30 classes @ 5 points per class)	150
(G) Out-of-Class Laboratory Case Study Written Team Exercise	100
(H) Out-of-Class Laboratory Case Study Team Oral Presentation	100
(I) Two (2) Midterm Exams (1 @ 130 & 1 @ 100 points)	230
(J) Final Exam	<u>100</u>
<i>Total Maximum Points</i>	<i>1,245</i>

Letter grades will be based on the following percentages of the Total Maximum Points assigned:

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 20 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

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 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>

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>.