

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

**CMGT 210 – Analysis of Construction Drawings and Specifications
Course Syllabus**

A. Prerequisites:

CMGT 100 – Concepts of Construction
CMGT 110 – Construction Graphics
CMGT 135 – Construction Materials & Systems

B. Meeting Time & Location:

CMGT 210-1	Class #3087	T/TH	11:00AM – 12:50PM	Langdon, Room 200
CMGT 210-3	Class #3089	T/TH	2:00PM – 3:50PM	Langdon, Room 200
CMGT 210-5	Class #3128	T/TH	9:00AM – 10:50PM	Langdon, Room 200

C. Instructor:

Alan Bond adbond@csuchico.edu
Office Hours: Tuesday/Thursday 5-6 PM, Wednesday 1-3PM, or by appointment
Office Location: O’Connell Technology Center, Room 327
Office Phone: 530-898-6355

D. Catalog Description:

A detailed study of construction drawings and specifications for *residential*, commercial, *industrial*, and *civil* projects.

This course is designed to provide the student with an introduction to reading construction drawings and specifications used in the construction industry; their relationship to the contract document package; and to use construction drawings to learn the basics of material quantity takeoff. The steps for plan and specification reading will be introduced and the student will work through this process during the course of the semester. A series of activity assignments will reinforce these steps. Discussion sessions and assigned readings will be assessed with quizzes and exams.

E. Course Learning Outcomes (CLO):

Upon successful completion of this course, the student will:

1. Understand the overall organization, specific purposes, and information provided in standard construction specifications (**Introduce: ACCE-SLO #7**).
2. Apply the ability to read 2D building plans and project specifications (**Introduce: ACCE-SLO #7**).
3. Remember the construct of business ethics code of conduct and analyze ethical decision making best practices. (**Introduce: ACCE-SLO #6**).
4. Understand various types of project delivery methods and the roles and responsibilities of the players (**Reinforce: ACCE-SLO #12**).
5. Apply the ability to successfully use OnScreen Takeoff (OST), PlanGrid, and Bluebeam Revu software (**Reinforce: ACCE-SLO #10**).
6. Understand the basic principles of mechanical, electrical and plumbing systems (**Introduce: ACCE-SLO #20**).

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 4 – Create construction project cost estimates (I).
- SLO 6 - Analyze professional decisions based on ethical principles (I).
- SLO 7 - Analyze construction documents for planning and management of construction processes (I).
- SLO 10 - Apply electronic-based technology to manage the construction process (R).
- SLO 11 - Apply basic surveying techniques for construction layout and control (I).
- SLO 12 - Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process (R).
- SLO 15 - Understand construction quality assurance and control (I).
- SLO 20 – Understand the basic principles of mechanical, electrical and plumbing systems (I).

ACCE Direct Assessment Mapping:

<u>SLO</u>	<u>CLO</u>	<u>Assessment Type</u>	<u>Week</u>	<u>Target</u>
There are no direct assessments performed in the course				

F. Course Resource Materials Requirements:

Textbook: There is no required textbook for this class. Reading material will be presented for the student, as required, via Bbl.

Course Pack: A course pack will be provided to the student at no cost. It includes the following:
Temporary license for the OnScreen Takeoff (OST) software,
Temporary license of Bluebeam Revu software,
An Educational license of PlanGrid software,
Plan set with highlighter,
Course work binder and tabs.

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

A Color Printer: Due to the nature of reviewing work using Bluebeam Revu, and the lack of a textbook, you will be required to turn in all Activities in color. Work in black and white will be accepted as incomplete and will have points deducted.

Advisory Note!

- ***OST and Bluebeam do not work on Mac based computer operating systems.***
- ***You will be responsible to have a PC based laptop or install a windows operating system on your Mac computer (dual boot environment only!).***
- ***See the "Use of Laptops" section of Blackboard learn for further information.***

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 the consequences. I expect each of you to conduct yourself in a professional and mature manner, showing courtesy and respect for fellow students and the instructor. Please review the Universities Disruptive Behavior policy under section M of this document.

Advisory Note!

- ***During class time any disruptive or annoying behavior, outbursts, unbecoming language, or personal visiting during discussion time will result in you being asked to leave and forfeit that day's participation points.***
- ***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 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.

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:

1. Class discussions and assigned readings.
2. Activities to be started in class (finished outside of class time as necessary), which are designed to reinforce the students learning process of reading plans and specifications.
3. Quizzes to expand the student's construction vocabulary, comprehension of discussion material, and assigned readings.

I. Assignments:

Out of class work will be assigned on a regular basis. *Completed assignments will be collected at the beginning of class*; please bring your work pre-printed to class for submission.

You will be allowed **ONE** "Mulligan" that may be used on any **ONE** activity assignment. This means that for any reason you may turn in this **ONE** assignment **UP TO 24 HOURS AFTER THE ORIGINAL DUE DATE**. The **ONLY** criteria is that you email me **PRIOR** to the original due date to notify me, **FOR THE RECORD**, that you will be taking your "Mulligan" on a particular assignment.

Advisory Note!

- **There will be NO class time available for printing assignments at the beginning of class.**
- **Assignments will be collected at the beginning of class and any submission during class time will be considered tardy and will be docked 15% of the available points.**
- **All other submission are considered late and will not be accepted for credit, unless prior arrangements have been made.**

Readings

Readings are noted in the course calendar. You are encouraged to have the required reading completed prior to class, as this will facilitate your comprehension of discussion materials.

Activities

There will be weekly activities assigned to reinforce your understanding of the current classroom discussion material. These activities are intended to build your skills in reading building plans and specification, by discipline, and continue your development in using common industry software.

Group Work

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

Course Work Binder

You will be required to keep all course work in a tabbed binder (provided). This requirement will be grading during exams 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 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 in the course calendar. Quizzes will be taken out of class, facilitated by. Bbl. Quizzes will be timed, as if you were taking them in the classroom. 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.**
- **Quiz dates are listed in the course work calendar posted on Bbl. Additionally, the quiz due dates are posted in your Bbl calendar.**

Exams

There will be three exams, each at given at approximately third points of the semester. Exam 3 will have overall coursework objectives 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 entitle to special dispensation the instructor should be notified in advance. Non-excused absences will yield a score of zero. Failure to turn in the exam with your answer sheet 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 at the END of each class, this is a major consideration in determining your participation points.**
- **It's your responsibly to "sign out" at the end of each class period. Please remind me if the roll sheet has not been distributed by the end class.**

K. Grading/Evaluation:

All point totals shown are approximate and subject to revision during the course of the semester.

Evaluation Criteria	Points	% of Final Grade	Weighting
<u>Quizzes, Course Binder, Participation</u>			25%
12 Quizzes	15 / each	15.00%	
Participation	80 points	6.67%	
Course Binder	40 points	3.33%	
<u>Exams</u>			30%
Exam 1	90 points	10.00%	
Exam 2	90 points	10.00%	
Exam 3	90 points	10.00%	
<u>Activities</u>			45%
11 Activities	40 / each	45.00%	

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

A	=	94 -100% (Exceptional)	C+	=	77 – 79% (Above Average)
A-	=	90 – 93% (Excellent)	C	=	73 – 76% (Average)
B+	=	87 – 89% (Very Good)	C-	=	70 – 72% (Below Average)
B	=	83 – 86% (Good)	D	=	60 – 69% (Inadequate)
B-	=	80 – 82% (Adequate)	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 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>.