

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

**CMGT 332 – Construction Methods Analysis
Course Syllabus**

A. Prerequisites

ACCT 201, CMGT 100, CMGT 110, CMGT 135, CMGT 210, and PHYS 202A (Grade \geq C)

B. Meeting Time & Location

CMGT 332-01/02	Class # 3095	M/W	8:00 AM – 9:50 AM (W 10:50 AM)	OCNL, Room 127
CMGT 332-05/06	Class # 3119	M/W	11:00 AM – 12:50 PM (W 1:50 PM)	OCNL, Room 127
CMGT 332-03/04	Class # 5527	M/W	2:00 PM – 3:50 PM (W 4:50 PM)	OCNL, Room 127

C. Instructor

Mike Borzage: kmborzage@csuchico.edu
Office Hours: Borzage: T 8-10:00 AM, Th 8-10:00 AM
or by appointment
Office Location: O’Connell Technology Center, Borzage: Room 329
Office Phone: Borzage: 530-898-4505

D. Catalog Description:

Provides methods and techniques to analyze all facets of a construction project or task, including preplanning techniques, processes of analysis and improvement, time lapse recording and analysis, mathematical simulation, ergonomics, human factors, and safety programs.

E. Course Learning Outcomes (CLO):

Upon successful completion of this course, the student will:

1. Have created several oral presentations to demonstrate their knowledge of construction methods analysis [**Direct Assessment: ACCE-SLO #2**].
2. Have analyzed construction documents and project models to plan and determine the means and methods to manage a construction project [**Direct Assessment: ACCE-SLO #8**].
3. Have participated on a multi-disciplinary team to apply construction method analysis principles and concepts to a construction project [**Direct Assessment: ACCE-SLO #9**].
4. Have applied model-based construction method analysis and Virtual Design and Construction technology to manage a construction project.

ACCE-SLO: American Council for Construction Education – Student Learning Outcomes

F. Student Learning Outcomes (SLO):

The following SLOs are supported by this course in the form of Introduction (I) or Reinforcement (R) or Direct Assessment (DA):

1. SLO 2 – Create written communications appropriate to the construction discipline (DA).
2. SLO 4 – Create construction project cost estimates (R).
3. SLO 5 – Create construction project schedules (R).
4. SLO 7 – Analyze construction documents for planning and management (R).
5. SLO 8 – Analyze methods, materials, and equipment used to construction projects (DA).

6. SLO 9 – Apply construction management skills as an effective member of a multi-disciplinary team (DA).
7. SLO 12 – Understand different methods of project delivery (R).
8. SLO 13 – Understand construction risk management (I).
9. SLO 15 – Understand construction quality assurance and control (R).
10. SLO 16 – Understand construction project control processes (R).
11. SLO 20 – Understand the basics of mechanical, electrical, and plumbing systems (R).

ACCE Direct Assessment Mapping:

<u>SLO</u>	<u>CLO</u>	<u>Assessment Type</u>	<u>When</u>	<u>Target</u>
2	1	Presentation	15	70% will earn a 70 or better
8	2	Assignment	6	70% will earn a 70 or better
9	3	Assignment	15	70% will earn a 70 or better

G. Course Resource Materials Requirements:

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

Required Course Materials:

Trimble Sketch-up Student Edition and Asta PowerProject Student Edition
 Autodesk Revit 2016 Student Edition
 Autodesk Navisworks Manage 2016 Student Edition
 Solibri Model Checker Student Edition

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

H. Course Requirements:

Conduct

The faculty believes 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, your decisions, and the subsequent consequences. We expect each of you to conduct yourself in a professional and mature manner, showing courtesy and respect for fellow students and the instructor. The Student Conduct Code, California Code of Regulations, Title 5, Article Section 41301/Standards of Student Conduct are referenced as a guideline for student behavior in this course.

Advisory Note!

This classroom is a BULLY Free Zone. During class time any disruptive or annoying behavior, bullying, outbursts, unbecoming language, inappropriate jokes, cursing, or personal visiting during class time will result in you being asked to leave the room. 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 phones, pagers, MP3 players, and other electronic devices, excluding laptops, is not permitted in class. If you must take a work or emergency call, 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 its presentation*. Consider this course as practice in presenting professional quality industry work to your future employer.

I. Instructional Methods:

This course is designed around the following methods of presenting material to the student:

1. Class discussions and assigned readings/online resources are reinforced by online Blackboard Learn Quizzes.
2. Assignments to be started in class, finished outside of class time as necessary, are designed to reinforce the students learning process.
3. Quizzes and Exams to expand the student's construction vocabulary and comprehension.

J. Assignments:

This course has ten project-related assignments and four presentation assignments. Assignments will be due on the due date assigned. Project assignments will accumulate in a lab notebook, which be submitted periodically during the semester for evaluation. Late assignments will not be accepted and will be graded as zero. No exceptions. All graded submittals must be received by the instructor NLT 5 PM Friday of the last week of classes.

All assignments are expected to be organized and legible. Sloppy work will be rejected and graded as zero. Homework assignment requirements will be clearly defined prior to issuance of the first assignment. Assignments will typically be posted on Blackboard Learn.

Extra Credit may be given for assignments at the discretion of the instructor.

Readings/Online Course Resources

Readings and Online Course Resources are available on Blackboard Learn. You are encouraged to familiarize yourself with the appropriate materials prior to class, as this will facilitate your comprehension of course materials and assignments.

Activities

There will be weekly activities assigned to reinforce your understanding of the current classroom course material. These activities are intended to build your skills and continue your development in using common industry software.

Team Work

You will be assigned a team. You are required to study and work in teams. Your project notebooks will be submitted as a team. You will make presentations with your team.

Project Notebook

You will be required to keep all team assignments in a provided, tabbed binder. This team project notebook will be graded and is a requirement for successful completion of the course.

K. 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) as defined by ACCE, see Section E. Instructional target goals for this course have been established 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, presentations, workshops, assigned readings, assignments, online course materials, and construction terms presented. A quiz may be given during any discussion or lab session. Quizzes may also be given on Bb Learn. Quizzes 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. Quizzes are to be completed individually, i.e. they are not a team assignment. Do not solicit or give help to anyone taking a 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 the instructor after the fact. It is your responsibility to remember that a quiz is due. Quiz dates will be listed in the course announcements posted on Blackboard Learn.

Exams

There will be one final comprehensive exam. The final exam will cover the overall learning objectives and have 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 entitled to special dispensation the instructor should be notified in advance.* Non-excused absences 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 for each class; this is a major consideration in determining your participation points. It's your responsibility to "sign in" for each class period. Please remind the instructor, if the roll sheet has not been distributed by the end class. There will be a peer evaluation at the end of the semester.

L. Grading/Evaluation:

Assignments:	50%
Exams & Quizzes:	30%
Participation:	10%
Attendance:	<u>10%</u>
	100%

Note: All late work including exams will have a maximum score of 70%, if it is accepted at all.

Grades are generally assigned by the following distribution, although the professor reserves the right to modify the distribution, as appropriate:

A	=	92 -100% (Exceptional)	C+	=	78 – 79% (Above Average)
A-	=	90 – 91% (Excellent)	C	=	72 – 77% (Average)
B+	=	88 – 89% (Very Good)	C-	=	70 – 71% (Below Average)
B	=	82 – 87% (Good)	D	=	60 – 69% (Inadequate)
B-	=	80 – 81% (Adequate)	F	=	< 60% (Failing)

M. Topical Outline

Refer to the course schedule attached and also posted on Blackboard Learn.

N. University Policies and Campus Resources

Academic Integrity

Students are expected to be familiar with the University's Academic Integrity Policy. Be familiar with the University's policy on academic honesty. The instructor takes 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/sjd/sja.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 the instructor as soon as possible, or see the instructor during office hours. Students with disabilities requesting accommodations must register with the ARC Office (Accessibility Resource Center) 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/stcp> 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://www.csuchico.edu/5.-studentservices.html>.

Accessibility Resource Center (ARC)

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor+ privately to discuss your specific needs. Please also contact the ARC office to coordinate reasonable accommodations for students with documented disabilities. ARC is online at: <http://www.csuchico.edu/arc>

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.

O. Other

The instructor reserves the right to modify the contents of this syllabus at any time during the semester at the instructor's discretion.

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