

CONE 433.01E CONSTRUCTION PROJECT CONTROLS

COURSE SYLLABUS: FALL 2024

INSTRUCTOR INFORMATION

Instructor: Taewoo Ko Ph.D., Assistant Professor

Office Location: AG/ET 119B

Office Hours: M, W, F 10:00 am - 12:00 pm or by appointment.

Office Phone: 9034688131 Office Fax: 9038865960

University Email Address: Taewoo.Ko@tamuc.edu

Preferred Form of Communication: Office Hours or Email Communication Response Time: 24-48 hours typically

Course Times: MW 04:00pm - 05:15pm

COURSE INFORMATION

Textbook:

Textbook Required: Project Control: Integrating Cost and Schedule in Construction Wayne J. Del Pico / 1st edition. Publisher: Wiley ISBN- 978-1-118-80271-7. The instructor will provide lecture slides/ handouts as references too.

Course Description

This course offers students the opportunity to delve into the essential concept of project control and its paramount importance in achieving project success. Throughout the course, students will gain a comprehensive understanding of how to seamlessly integrate and manage both schedule and budget in a systematic and user-friendly manner. Additionally, students will explore the intricacies of measuring and tracking project performance, equipping them with the necessary tools to analyze projects at any stage.

Student Learning Outcomes

After completing this course:

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

- 1. Create detailed budgets and CPM (Critical Path Method) schedules,
- 2. Develop the skills needed to consistently monitor performance,

The syllabus/schedule are subject to change.

- 3. Integrating the schedule and the budget and obtaining the detail on how both come together to create the full view of project control
- 4. Take corrective action promptly, ensuring projects stay on track both in terms of time and budget.
- 5. Understand why productivity is so important for accurate project control
- 6. Demonstrate an understanding of how risk can be managed, and funded, and how its probability is determined.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

- 1. A scientific calculator for exams.
- 2. Microsoft Word, Excel, PowerPoint.

Instructional Methods

This course utilizes lectures, and assignments to assist students in achieving the course learning outcomes.

Student Responsibilities or Tips for Success in the Course

Students should attend the lectures and deliver the assignments in a timely manner.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80% - 89%

C = 70%-79%

D = 60% - 69%

F = 59% or Below

Weights of the assessments in the calculation of the final letter grade.

Assessment Type	Score	Weight
Homework	100	25%
Mid-term Exam	100	25%
Final Project and Report	100	25%
Final Exam	100	25%

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Total	400	100%
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Assessments

The assessment criteria for the stated student learning outcomes will include homework assignments, a term project, a midterm exam, and a final exam.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

The instructor will response to your questions on D2L tools within 24 hours. For urgent questions, and for questions that are not answered within 24 hours, please prefer e-mail correspondence.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

- 1. One day late assignment is accepted with a 15% grade deduction; after this, no assignment will be accepted.
- 2. You will be expected to do all the readings throughout the semester.
- 3. Each exam will be given in class. Exams are closed book and notes (necessary formulas will be provided on a separate page). Students will need a scientific calculator for exams. Cell phones are not acceptable as a calculator. Use of unauthorized aids on exams will result in a grade of zero.
- 4. There will be one group project.
- 5. The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.
- 6. No make-up exams will be permitted unless official documentation for absences is provided (e.g., death in the family, illness).

"Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty"

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

 $\underline{\text{http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as}}\\ \underline{\text{px}}$

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u> <u>Undergraduate Student Academic Dishonesty Form</u>

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

The syllabus/schedule are subject to change.

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

 $\underline{\text{http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ}}$

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Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

Week	Date	Topics	Homework
1	8/26	Introduction	
	8/28	The Basics (Ch. 1)	
2	9/2	Labor Day	
	9/4	Introduction of Project Control (Ch. 2)	
3	9/9	Introduction of Project Control (Ch. 2)	Homework 1
	9/11	Pre-Construction Planning (Ch. 3)	
4	9/16	Pre-Construction Planning (Ch. 3)	Homework 2
	9/18	The Schedule (Ch. 4)	
5	9/23	The Schedule / Budget (Ch. 4&5)	
	9/25	The Budget (Ch. 5)	Homework 3
6	9/30	Integrating the Schedule and the Budget (Ch. 6)	
	10/2	Integrating the Schedule and the Budget (Ch. 6)	Homework 4
7	10/7	Calculating and Analyzing Progress (Ch. 7)	
	10/9	Calculating and Analyzing Progress (Ch. 7)	Homework 5
8	10/14	Midterm Review	
	10/16	Midterm Exam	
9	10/21	Analyzing and Reporting Variances in Schedule and Cost (Ch. 8)	
	10/23	Analyzing and Reporting Variances in Schedule and Cost (Ch. 8)	Homework 6

10	10/28	Recognizing Trends and Forecasting Performance (Ch. 9)	
10	10/30	Recognizing Trends and Forecasting Performance (Ch. 9)	Homework 7
	11/4	Productivity (Ch. 10)	
	11/6	Productivity (Ch. 10)	Homework 8
	11/11	Acceleration and Schedule Compression (Ch. 11)	
12	11/13	Acceleration and Schedule Compression (Ch. 11)	Homework 9
	11/18	Risk Management (Risk Identification/Assessment/Control) (Ch. 13)	
13	11/20	Risk Management (Contingency) (Ch. 13)	Homework 10
	11/25	Thanksgiving Break	
14	11/27	Thanksgiving Break	
15	12/2	Project Presentation	Final Report
	12/4	Final Review	
16		Final Exam	