# COURSE SYLLABUS CNET4170 Construction Management

## **COURSE INFORMATION**

**Credit Hours:** 3 **Term:** Fall 2018 **Time:** (M-W) 2:30 pm -3:50 pm **Classroom:** F187

### **INSTRUCTOR INFORMATION**

Name: Dr. Saman Rashidyan Office: Discovery Park F115V Office Hours: (Tu-Th) 10:00am-11:30am & (Tu-Th) 4:00pm-5:00pm or by appointment Phone: (940) 369-5263 Email: Saman.Rashidyan@unt.edu

### **COURSE DESCRIPTION**

This course presents planning, organizing, scheduling and managing construction projects. Includes preconstruction planning, cost and quality control, materials procurement, subcontractor management, start-up and close-out.

## COURSE OBJECTIVES

By the end of the course, you will be able to:

- Describe the need for and nature of management structure in the construction industry.
- Develop a basic construction-based company structure with the consideration of project-level and strategic planning, contractual responsibilities, and risk.
- Determine the impacts of schedule management and economic considerations on individual projects and companies.
- Manage the selection, retention, and use of equipment and labor by a construction company.

### **STUDENT OUTCOMES (BASED ON ABET)**

- Performing economic analyses and cost estimates related to design, construction, and maintenance of systems associated with construction engineering (#5).
- Applying appropriate principles of construction management, law, and ethics (#7).
- Knowing the impact of engineering technology solutions in a societal and global context (#13).

## MATERIALS

# Required Textbook

*Construction Management*<sup>\*</sup> (5<sup>th</sup> Edition) by Daniel W. Halpin, Bolivar A. Senior and Gunnar Lucko (Wiley 2017).

\*Course outline is based on this textbook.

## **TENTATIVE COURSE OUTLINE**

The course outline may be subjected to modifications with notice.

WEEK	ΤΟΡΙϹ	CHAPTER BOOK
1	Introduction to Construction Management Preparing the bid package	1,2
2	NO CLASS (September 3) Issues during construction	3
3	Contracts Legal Structure	4,5
4	Impact of Taxes Project Planning	6,7
5	Project Scheduling	8
6	Scheduling-Linear Operation Advanced Linear Scheduling Techniques	9
7	<b>Exam #1 (October 8)</b> Review of Midterm Exam/Project Introduction The Mathematics of Money	10,11
8	The Mathematics of Money Project Cash flow	11,12
9	Project Funding Equipment Ownership	13,14
10	Equipment Productivity	15
11	Exam #2 (November 5) Review of Midterm Exam/Project Introduction Construction Labor	16
12	Construction Labor Estimating Process	16,17
13	Cost Control Materials Management	18,19
14	Guest presentation Site survey	
15	Students Presentations Students Presentations	
16	Final Exam (December 10)	

## **COURSE REQUIREMENTS**

#### Exams

Exams will be based on text books, handouts, class exercises, homework, class lectures and class discussions. Students are responsible for all text material, regardless of whether we review the text material in class or not.

*Missed Exams:* You will be allowed to make up missed exams only if you have a documented university excused absence. Make-up exams may not be the same as the original.

## Homework

Homework is due one week, unless otherwise noted. Please fold your homework, put your name on it and place it on instructor's desk before class begins.

*Late Homework:* You are allowed to turn in only ONE late homework. The late homework will not be accepted if it is submitted more than one week.

The homework will be graded holistically (i.e. not based on the number of right or wrong answers but on the overall quality of your submission).

#### Project

The project will be done in groups of 2 to 3, all of whom will receive the same grade for it. The project will consist of a written report and presentation, with the report to be worth 10 points and the presentation to be worth 5 points towards the overall final grade.

### GRADING

Midterm Exam #1	20
Midterm Exam #2	20
Final Exam	25
Project	15
Homework	20
Total	100

#### **GRADE DISTRIBUTION**

90 – 100 and higher	А
80-89	В
70-79	С
60-69	D
Below 60	F

## **DISABILITIES ACCOMMODATION**

Any accommodations for differing abilities will be made for this course as per the policies and determination of the Office of Disability Accommodation: <u>http://disability.unt.edu/</u>

## **ADDITIONAL POLICIES**

- Please turn off your cell phones prior to class.
- Using cell phones and personal computers are not allowed during exams.