

Project Planning and Management
CNST 6330

Course Description

Employers who hire Construction Managers expect good knowledge of planning and scheduling skills. The goal of this course is to assist you in reaching the expected skills and knowledge. Specifically, the course addresses the development/use of bar charts, CPM network diagrams, CPM calculations, and other selected topics such as resource leveling and network crashing. In addition, a term project is assigned to provide the students with hands-on experience in preparing a project schedule using Primavera Software.

Course Prerequisites

Graduate standing or consent of instructor.

Textbook

Construction Planning and Scheduling, by Hinze, Prentice Hall

Learning Objectives

Students should be able to demonstrate the ability to:

1. Understand Planning Principles
2. Use Scheduling Techniques
3. Implement Computer-Aided Scheduling (Primavera P-3) to prepare level-3 CPM schedules

Schedule of Topics*

Module#	Topics	Reading Assignments
1 (week 1-2)	Introduction - Definitions - WBS - Bar-Charts - Limitations of Bar Charts	Chapter 1, 2, and 3
2 (week 3-4)	Network Presentation - Notations of Arrow Diagrams - Logic and Dummy Activities - Development of ADM Network	Chapter 4, 5, and 6
3 (week 5-6)	CPM Calculations - Time Estimates - CPM Calculations	Chapter 7, and 8
4 (week 7-8)	Project Update - Calculations Process - Status Report - Illustrative Example of Network Update	Chapter 9 and 10
5 (week 9-10)	Schedule Compression - Cost-Time Trade Off (Network Crashing) - Cost-Time Trade Off Exercise	Chapter 11

6 <i>(week 11-12)</i>	Project Control - Time-Scaled Networks - Resource-Loaded Schedules - S-Curves (ES, LS, Target) - PERT	Chapter 16
7 <i>(week 12-15)</i>	Computer Applications in Scheduling - Use of Primavera Software - Exercises	Chapter 25

Homework Assignments

Late submissions will incur score penalties. Homework submission must be through Blackboard as an attachment to an email.

Quizzes

Quizzes are designed to assist you in understanding the course materials and to provide you with examples of the type of questions that will be on the final exam. A quiz is posted for each module. It is recommended that you take the quiz immediately after you complete each module. You are allowed only one chance to open each quiz. Do not attempt to open a quiz until you are ready to answer the questions and complete the quiz.

Final Exam

Students will be requested to take the final exam on UH campus. However, students residing outside of a reasonable distance from the city of Houston may request to take the final exam at a designated testing facility convenient to their geographical locations. Final Exam is scheduled during week 15. Exact time and location will be announced during the semester. Students must make early arrangements with their employers and others to make sure they do not miss the Final Exam. There will be no makeover exams.

Academic Honesty

The instructor reserves the right to adjust letter grades, upward only, based on individual attendance and class participation if numerical grade warrants such consideration. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from The University. Since dishonesty harms the individual, all students, and the integrity of The University, policies on scholastic dishonesty will be strictly enforced.

Students with Disabilities

University of Houston provides, upon request, appropriate academic adjustments for qualified students with disabilities. Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact the Center for Students with Disabilities (713/743-5400) for more assistance.

Exam Policy

Exams will include material covered in class discussions and homework assignments. The student is responsible for all reading assignments and class handouts whether or not covered in class or listed on the syllabus.

Course/Instructor Evaluation

A course/instructor evaluation will be conducted in class during the last scheduled lecture. Any suggestions you have on improving the course, however, are welcome throughout the term.

For detailed information about Disabilities, Religious Holy Days, the Academic Calendar, and Academic Honesty, and other information, please visit the UH website:

http://www.uh.edu/provost/stu/stu_syllabsuppl.html