CNET3190 Construction Scheduling
(3 credit hours: 2+3)

Instructor: Zhenhua Huang
Office: Discovery Park F115M
Office Hours: (T) 9:30 am - 12:20 pm
Phone: 940-369-8148
Email: zhenhua.huang@unt.edu

Spring 2026
Lecture: (T TH) 8:30 am - 9:20 am
Room: E264
Lab: (TH) 5:30 pm - 8:20 pm
Room: F75

Course Description:

Principles, analysis, and methodologies for construction planning and scheduling: emphasis on the role of project duration, resources, and costs. Topics include developing a network model, precedence diagrams, activity durations and floats, resource allocation and leveling, cash flow, monitoring and control, linear scheduling, and computer scheduling (Primavera P6).

Course Objectives:

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

- Understand the concepts of project planning and scheduling.
- Know how to develop and analyze a network model.
- Understand the concepts of project duration, resources, and expenses.
- Know how to calculate and analyze the duration, resource allocation, resource leveling, and cash flow.
- Know how to develop and analyze linear schedules.
- Know how to use Primavera P6 to develop and analyze schedules and control the project progress.

Course Outcomes:

- ABET #1: an ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline
- Assessment of this outcome will be based on quizzes, homework/lab assignments, scheduling projects, and the final examination.

Course Requirements:

Attendance: Attendance is mandatory. More than six unexcused absences will result in a course grade of "F." University-approved excused absences must be documented.

Required text Construction Planning and Scheduling (4th)
Jimmie W. Hinze
Pearson Prentice Hall; ISBN: 978-0-13-247398-9

Exams: There will be two quizzes and one final exam. Quizzes are worth 20 points each, and the final exam is worth 30 points. Exams will be based on text readings, handouts, class exercises, videos, and class lectures and 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 a missed exam only if you have a documented university excused absence. If you know in advance that you will miss an exam, you MUST contact me before the scheduled exam. Make-up exams will not contain the same questions.

Assignments: In addition to the readings from the text, there will be writing assignments. All assignments must be submitted through Canvas by the stated deadline. No late assignments will be accepted. No emailed assignments will be accepted.

Grading Policy:

Grades will be based on:

Attendance, Participation, and Professionalism @ 10	=	10 pts
Homework and Primavera Assignment @ 10	=	10 pts
2 quizzes @ 20	=	40 pts
Project @ 10	=	10 pts
Final @ 30	=	30 pts
		100 pts

Extra credit: There is none.

Grade Distribution:

90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
Below 60 = F

Disabilities Accommodation:

The University of North Texas complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. The University of North Texas provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. 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 believe you have a disability requiring an accommodation, please see the instructor and/or contact the Office of Disability Accommodation at 940-565-4323 during the first week of class.

Academic integrity statement

Academic dishonesty, including cheating, plagiarism, or unauthorized collaboration, will be handled in accordance with University of North Texas policies.

Course Schedule:

Class Week	TOPIC	BOOK CHAPTER
Week 1	Intro/Bar Charts	1
Week 2	Network Model	2
Week 3	Precedence Diagram	3
Week 4	Duration	4
Week 5	Resource Allocation (Series)	6
Week 6	Quiz 1	
Week 7	Resource Allocation (Parallel)	6
Week 8	Resource Allocation (Brooks)	6
Week 9	Resource Leveling	6
Week 10	Cost Management	7
Week 11	Quiz 2	
Week 12	Earned Value	10
Week 13	Linear Schedule	14
Week 14	Advanced Topics	15
Week 15	Project Presentation	
Week 16	Final Exam	