

**HOSTOS COMMUNITY COLLEGE
DEPARTMENT OF MATHEMATICS**

CMT 100 CONSTRUCTION MANAGEMENT I
CREDIT HOURS: 3.0
EQUATED HOURS: 3.0
CLASS HOURS: 3.0 (3 Class Hour, 0 Lab Hours)
PREREQUISITE: ESL 86-88 or ESL 91 or higher, or ENG 100 or higher

REQUIRED TEXT(S):

1. *Construction Project Management*, by Frederick Gould and Nancy Joyce, 4th Edition, Pearson, 2014. (ISBN-13: 9780137546008)
2. *PMI Lexicon of Project Management Terms*, by Project Management Institute (PMI), 3rd Edition. (Copy available in School's Library or by creating a free account for <https://www.pmi.org/>)

REFERENCE(S):

1. *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*, by Harold R. Kerzner, 11th Edition, Wiley (ISBN: 978-1-118-02227-6)
3. *The Complete Project Manager's Toolkit*, by Randall Englund and Alfonso Bucero, MSC, PMP (ISBN-13: 978-1567263602; ISBN-10: 1567263607)
4. *Project Management Case Studies* by Harold R. Kerzner, 4th Edition; (ISBN-13: 978- 1118022283; ISBN-10: 1118022289)
5. *Project Management: A Managerial Approach*, by Jack R. Meredith, Samuel J. Mantel, Jr., Scott M. Shafer, 9th edition

DESCRIPTION: A broad introduction to project management and the overall construction project lifecycle; from initiation through project completion and closeout. Based on this information, the role of a project manager and the skills required to manage a construction project successfully are considered. Topics include formal and informal communication formats, the design and construction process, types of contracts, responsibilities of project participants, contract documents, schedules, payments, building codes, and safety. Formal and informal communication are addressed through a series of spoken and written assignments culminating in a written report. This class represents a macro view, and subsequent classes delve into the additional detailed skills required of project managers.

GRADING CRITERIA:

PMI Journal Articles/ General Assignments (6 x 5%)	30%
Project Report	20%
Midterm Exam	20%
Final Exam	20%
Attendance/Participation	<u>10%</u>
	100%

Attendance policy: Grade drops after three missed classes (for example, A to a B; B+ to a C+). Three late arrivals are equal to one skipped class. Six or more unexcused absences will result in a failing grade for the course. THIS POLICY WILL BE STRICTLY ENFORCED.

GRADES: A, A⁻, B⁺, B, B⁻, C⁺, C, D, I, F.

Program Criteria

ABET, Inc. is the nationally recognized accrediting body for engineering technology programs. The Department has adopted the most current ABET Program Criteria. Graduates of a construction degree programs typically specify project methods and materials, perform cost estimates and analyses, and manage construction activities. The curriculum provides instruction in the following areas:

- utilization of techniques that are appropriate to administer and evaluate construction contracts, documents, and codes;
- estimation of costs, estimation of quantities, and evaluation of materials for construction projects;
- utilization of measuring methods, hardware, and software that are appropriate for field, laboratory, and office processes related to construction; and
- application of fundamental computational methods and elementary analytical techniques in sub-disciplines related to construction engineering.

Student Learning Outcomes

The Department has adopted the most current ABET student outcomes criteria. Student performance in this course will be assessed based on the following learned capabilities:

- 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 (Criterion 3.A.1.); and
- an ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature (Criterion 3.A.3.)

COURSE OUTLINE

Week	Topic	Assignment
1	Introduction to Construction Management & Project Participants (Chapter 1-2)	
2	The Construction Industry & Project Delivery (Chapters 3-4, 12)	Assignment 1
3	Project Management and Superintendent Roles (Chapter 2-3)	
4	Project Chronology and Scheduling (Chapters 5, 10)	Assignment 2
5	Construction Services During Design, Construction and On-Site (Chapter 6)	Assignment 3
6	Pre-construction and Construction Processes (Chapter 10)	
7	Midterm Exam	
8	Estimate, Bids, Request for Proposals (Chapter 7 & 9)	Project Report

Week	Topic	Assignment
9	Awards & Contracts (Chapter 7)	Assignment 4
10	Insurance & EMT, Bonds	
11	Safety & Responsibility Management (Chapter 14)	Assignment 5
12	Safety and Labor Law (Chapter 13 & 14)	
13	Controlling Project Cost, Time, and Quality (Chapter 11)	Assignment 6
14	Construction Closeout (Chapter 8)	
15	Final Exam	

Note that this syllabus is a suggested timeline only. Instructors are responsible for covering all of the material in the syllabus, but they may do so at their own pace.