

CMCE 1221 CONSTRUCTION MANAGEMENT I

Equivalent to old course: CMCE 1220

Course Description:

A thorough overview of the construction process from the planning phase to successful completion. 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. Project safety is addressed in a required 10-hour OSHA certification training course. Upon successful completion, the student earns a certification card from OSHA.

Prerequisites: CMCE 1110, CMCE1114, CUNY Reading and Writing Proficiency
3 Class hours, 3 credits

Textbook: Construction Project Management, F. E. Gould, 3rd edition. Pearson 2009.

Certification: OSHA 10

Program Criteria

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

- Utilization of techniques that are appropriate to administer and evaluate construction contracts, documents, and codes (Criterion a);
- Production and utilization of documents related to design, construction, and operations (Criterion e);
- Performance of economic analyses and cost estimates related to design, construction, and maintenance of systems associated with construction engineering; (Criterion f);
- Application of appropriate principles of construction management, law, and ethics (Criterion h);

Student Outcomes

The CMCE 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 broadly-defined engineering problems appropriate to the discipline (Criterion 1);
- An ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature (Criterion 3);

Academic Integrity Policy

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity.

Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, or expulsion.]

Course Outline

Week	Class Schedule	Topic	Reading Assignment	Homework
1	Lecture 1	Introduction to CM I Informal Communication	HW1, Ch.1-2	
2	Lecture 2	The Construction Industry & Project Delivery	HW2, Ch. 5	
3	Lecture 3	Project Chronology & Scheduling	HW3, Ch. 6, 8	Assignment 1
4	Lecture 4	Construction Services During Design, Construction, & On Site	HW4, Ch. 12	Assignment 2
5	Lecture 5	Estimates, Bids, Requests for Proposals	HW5, Ch. 7	Assignment 3
6	Midterm	Award & Contracts		Study for Midterm
7	Lecture 6	MIDTERM EXAM	Ch. 9, 13	Assignment 4
8	Lecture 7	Billing, Claims, & Change Orders	HW6, Ch. 14	Assignment 5
9	Lecture 8	Insurance & EMR, Bonds	HW7	Assignment 6
10	Lecture 9	Project Documentation, RFIs, & Reports OSHA certification course (1 hr)		Assignment 7
11	Lecture 10	OSHA certification course (3 hr – class ends at 12:00)		
12	Lecture 11	OSHA certification course (3 hr – class ends at 12:00)		Finalize Term Project
13	Lecture 12	OSHA certification course (3 hr – class ends at 12:00)		
14	Lecture 13	Term Project Due		
15	Final Exam	Review for Final Exam		Study for Final