# HOSTOS COMMUNITY COLLEGE DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

CMT 200 CONSTRUCTION MANAGEMENT III

CREDIT HOURS: 3.0 EQUATED HOURS: 3.0 CLASS HOURS: 3.0

**PREQUISITE:** CMT150 (Construction Management II)

**REQUIRED TEXTBOOK:** Construction Project Administration, Fisk and Reynolds, 10th

edition, Pearson 2014.

**REFERENCE:** Documents available from General Contractor's Association and

OSHA.

**COURSE DESCRIPTION:** This course builds on the concepts developed in Construction

Management II to provide students with a thorough understanding of the current practices for planning, documenting, managing, and analyzing construction projects. Students use industry standard computer scheduling software in preparing a Critical Path Method (CPM) project schedule and study the use of value engineering (VE)

workshop to reduce construction costs.

#### **GRADING CRITERIA:**

Assignments (5 x 5%)	25%
Scheduling Project	15%
Midterm Exam	20%
Final Exam	30%
Attendance/Participation	10%
-	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 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);
- Demonstrate utilization of measuring methods, hardware, and software that are appropriate for field, laboratory, and office processes related to construction (Criterion c);
- Production and utilization of documents related to design, construction, and operations (Criterion e);
- Selection of appropriate construction materials and practices (Criterion g);
- Application of appropriate principles of construction management, law, and ethics (Criterion h);

## **Student Learning 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 design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline (Criterion 2):
- 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.

## **Course Outline:**

Week	Topic	Deliverables
1	<ul><li>Introduction to Construction Management III</li><li>Planning for Construction.</li></ul>	• InClass01
2	Planning for Construction Cont'd	<ul><li>InClass02</li><li>Complete after class: HW01</li></ul>

3	<ul><li>Planning for Construction Cont'd</li><li>Site Logistics Planning</li></ul>	<ul><li>InClass03</li><li>Complete after class: HW02</li></ul>
4	Reading & Understanding Schedules	<ul><li>InClass04</li><li>Complete after class: LAB01</li></ul>
5	Fundamentals of CPM Construction Scheduling	• InClass05
6	MIDTERM EXAM	<ul><li>Midterm</li><li>Complete after class: HW03</li></ul>
7	Fundamentals of CPM Construction Scheduling, cont.	• InClass06
8	Fundamentals of CPM Construction Scheduling, cont.	• InClass07
9	Planning & Scheduling Technology	<ul><li>InClass08</li><li>Complete after class: LAB02</li></ul>
10	Primavera P6	<ul><li>InClass09</li><li>Complete after class: HW04</li></ul>
11	Primavera P6	• InClass10
12	Primavera P6	<ul><li>InClass11</li><li>Complete after class: LAB03</li></ul>
13	Primavera P6	• InClass12
14	Planning & Scheduling Technology	
15 – 5/24	FINAL EXAM	• Final