

COURSE OUTLINE
ARCM-200
Construction Management
3 Credits

HOWARD COMMUNITY COLLEGE

Description

This course will introduce the student to construction project management. The student will gain an understanding of the skills, procedures, methodology and techniques required to manage construction projects. Topics include construction and design roles, company organization, construction contracts, and cash flow management. This course provides a basic introduction to the use of computers in construction management. Prerequisite: ARCM-102. (2 hours lecture, 2 hours lab)

Overall Course Objectives

Upon completion of this course, the student will be able to:

1. Manage the various activities necessary for the completion of a construction project.
2. Demonstrate a commitment to good ethical practice in project management.
3. Describe the basic aspects of construction methodology, including estimating, scheduling, contracts, subcontractor management, cost control and project administration.
4. Identify the roles and responsibilities of the owner, architect, general contractor, and other participants in the construction management process.
5. Discuss the management of project information during the various phases of the project.
6. Describe the field operations and systems used to manage the construction process.
7. Describe the responsibilities of the project management team in contract administration.

Major Topics

- I. Overview of Construction and Design Industries
 - A. Construction Industry Divisions
 - B. Construction Process
 - C. Codes and Regulations
- II. General Contractor Organizations
- III. Role of the Project Manager
 - A. Elements of Project Management
 - B. Quality Management
 - C. Safety and Health
- IV. Project Estimating
 - A. Estimating
 - B. Bidding
 - C. Funding

- V. Scheduling
 - A. Scheduling Principles
 - B. Scheduling Methods
- VI. Construction Contracts
 - A. Contract Elements
 - B. Types of Contracts
 - C. Contract Administration
- VII. Cash Flow/Requisitions
 - A. Financial Planning
 - B. Project Cost Control
 - C. AIA Documents and Forms
- VIII. Change Order Management
 - A. Sources of Change Orders
 - B. Mitigating Change Orders
- IX. Role of Subcontractors
 - A. Types of Subcontractors
 - B. Subcontractor Management
- X. Project Closeout and Turnover
 - A. Project Transition
 - B. Project Turnover/Acceptance

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will be calculated on the basis of exams, homework assignments and group projects.

Other Course Information

This course is required in the Architectural and Construction Management Program.