



Course Code CVEE-250	Course Title Construction Management	ECTS Credits 5
Department Engineering	Semester Spring	Prerequisites CVEE-151
Type of Course Required	Field Civil & Environmental Engineering	Language of Instruction English
Level of Course 1 st Cycle	Year of Study 2 nd	Lecturer(s) Dr Antonia Sophocleous- Lemonari
Mode of Delivery Face-to-face	Work Placement N/A	Co-requisites None

Objectives of the Course:

The main objectives of the course are to:

- Give an overview of Construction Management Principles.
- Use MS Project software for Planning and Scheduling.
- Gain Basic Knowledge on the fundamentals of Health and Safety Rules and Regulations for Construction Projects.

Learning Outcomes:

After completion of the course students are expected to:

- Help organizations achieve the objectives of scope, quality, budget, and schedule of their projects within the context of the developing environment.
- Inform professionals of directing and coordinating human-, equipment-, material-, and financial resources to develop a project.
- Give maximum attention to project details in the most cost-effective way possible while maintaining a broad perspective of the project.
- Enhance their technical-, communication-, decision-making-, problem-solving-, interpersonal- and leadership skills.
- Define Safety and Health Issues related to Construction Process.

Course Contents:

- Introduction to Construction Management Principles: Evaluate, Organize, Plan, Monitor, Control and Learn. Project Scope: Time/Schedule, Cost/Budget, Natural-, Political- and social environment.
- Project Financing and Evaluation. Dealing with Uncertainty. Issues with Bids. Bidding, negotiations, cost estimations. Bill of Quantities.
- Project Planning and deterministic Scheduling using MS Project software for Work Breakdown Structure (WBS), Gantt and bar charts reporting tools, Critical Path method (CPM) and representations. Project effective Control and basic

Monitoring. Reporting performance.

- Introduction to Health and Safety for Construction Work Plan: Securing Justice, Construction Operational Activities, Enabling Activities.
- Health and Safety: Hazardous procedures, products and processes that should be eliminated from the project where possible.
- Health and Safety: Products, processes and procedures to be eliminated or reduced as far as possible and only specified/allowed if unavoidable.
- Health and Safety: Products, processes and procedures to be positively encouraged
- Under Construction: The Basics. Managing Documents. Problems and Disputes.

Learning Activities and Teaching Methods:

- Lectures in class, Interactive Discussions, Recitations
- Syllabus Handouts, Surveys, Project Assignments
- Guest's Lectures
- Problem sets
- Software Package: MS Project

Assessment Methods:

Individual Participation Term Project / Individual Grading Assignments / Individual Grading, Final Exam.

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Harold Kerzner.	Project Management A Systems Approach to Planning, Scheduling, and Controlling	John Wiley & Sons	2001	0-471-39342-8

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Harold R. Kerzner	Project Management: Case Studies	John Wiley & Sons	2013	ISBN-13: 978- 1118022283 ISBN-10: 1118022289
Rita Mulcahy, PMP et al.	PMP Exam Prep, Eighth Edition: Rita's Course in a Book for Passing the PMP Exam	PMP	2013	ISBN-13: 978- 1932735659 ISBN-10: 1932735658