



Course Syllabus

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

Course Objectives:

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 be able 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 Content:

- 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, Computer Lab sessions, daily/weekly projects (homework), Project

Assessment Methods:

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

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Project Management: A Systems Approach to Planning, Scheduling, and Controlling	Harold Kerzner	Wiley	2017	978-1119165354

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Project Management: Case Studies	Harold Kerzner	John Wiley & Sons	2013	978-1118022283