



**The Hashemite University
Faculty of Engineering
Civil Engineering Program
Course Syllabus**



Course Title: Construction Project Management **Course Number:** 110401346
Designation: Compulsory **Prerequisite(s):** 110401337
Instructor: Prof. Khaled Hyari **Instructor's Email:** hyari@hu.edu.
Office Hours: 9:00 – 10:00: Sun., Tue. & Thurs., 8:30 – 9:30: Mon. & Wed.

Course Description: Application of engineering and management control techniques to construction projects in order to satisfy project objectives in terms of time, cost, and quality. Leadership in project management, construction disputes resolution and negotiation strategies, project human resources management, value engineering and project life cycle, construction process optimization, financial accounting

Textbook(s):

- Halpin, D. W. (2011) "Construction Management" Fourth Edition, John Wiley & Sons.

Other supplemental materials

- Hinze, J. "Construction Planning and Scheduling", 4th Edition, Prentice Hall, 2012
- Jackson, B. J., "Construction management – Jump Start", Wiley Publishing Inc., 2nd Edition, 2010.
- Hendrickson, C. "Project Management for Construction", second edition, 2008. <http://pmbook.ce.cmu.edu/>
- Gould, F., and Joyce, N. E., "Construction Project Management", Prentice Hall, 2009.

Course objectives: The primary objective of this course is to provide students with advanced knowledge and skills to be able to effectively manage construction projects through an understanding of basic theories and advanced techniques for project management planning, optimization, and control in addition to basic knowledge and skills in human resources management and construction disputes resolution

Major Topics Covered:

Topics	No. of Weeks	Contact hours*
Introduction to construction industry	1	3
Construction planning	1	3
Construction project time management	1	3
Construction scheduling	2	6
Leadership in project management	1	3
Construction process optimization	2	6
Construction safety	2	6
Engineering economic principles	3	9
Construction project quality management	2	6
Total	15	45

*Contact hours include lectures and exams

Specific Outcomes of Instruction (Course Learning Outcomes):

After completing the course, the student will be able to:

1. Develop and analyze project schedule and prepare a construction plan for projects (c, e)
2. Develop an ability to apply engineering economy principles to solve and analyze engineering problems encountered. Formulate and solve a construction optimization problem to improve efficiency of construction processes (e, f)



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3. Understand the importance of safety and quality in construction projects. (c, f)
4. Understand the leadership competencies of a successful project manager and the need to continually improve leadership skills during professional practice. (i)
- 5.

Student Outcomes (SO) Addressed by the Course:

#	Outcome Description	Contribution
General Engineering Student Outcomes		
(a)	an ability to apply knowledge of mathematics, science, and engineering	
(b)	an ability to design and conduct experiments, as well as to analyze and interpret data	
(c)	an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	M(30)
(d)	an ability to function on multidisciplinary teams	
(e)	an ability to identify, formulate, and solve engineering problems	M(30)
(f)	an understanding of professional and ethical responsibility	M(30)
(g)	an ability to communicate effectively	
(h)	the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
(i)	a recognition of the need for, and an ability to engage in life-long learning	L (10)
(j)	a knowledge of contemporary issues	
(k)	an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	
H=High, M= Medium, L=Low		

General Notes:

First Exam: Wednesday, 8/11/ 2017

Second Exam: Wednesday, 13/12/ 2017

Prepared by:

Prof. Khaled Hyari

Date: 21th Sep. 2017