

Zarqa University

Faculty of Engineering

Department: Civil

Course title: Project management



Prerequisite: 902200, 906302

Instructor: Dr. Ghanim Bekr

Lecture's time: Mon, Wed. 11-12:30

Semester: second 2016/2017

Office Hours: 9-10

Course description: Scientific methods of project management; Network analysis using arrows, nodes; Critical activities and critical path; Activity duration and project duration; Program Evaluation and Review Technique, Line of Balance, Project time and cost relationship (Minimum cost expediting); Resource allocation and resource leveling.

Aims of the course: The aim of the course is learning to how to foresee or predict as many dangers and problems as possible; and to plan, organize and control activities so that the project is completed as successfully as possible despite all the risks. This success is represented by time, cost and performance.

Intended Learning Outcomes (ILOs):

At the completion of this project management course, the students should be able to

1. Use a structured approach, prepare a project plan, incorporate appropriate plans, understand schedules, and understand specific outputs and deliverables for each step of the plan.
2. Define the scope of a project and identify means of controlling changes to the scope.
3. Describe processes that can be used to develop ongoing stakeholder commitment to a project, and to manage issues arising from the project's dependence on external groups.
4. Incorporate techniques which ensure commitment to project completion from a project team in a matrix management organization.
5. Describe methods for timely and accurate reporting of progress against plan.



Course structures:

Week	C. Hrs	ILOs	Topics	Teaching Procedure	Assessment methods
1	3	1	Introduction to project management	Lectures and Tutorials	H.W, Quizzes & Exams
2	3	1 & 2	Construction project planning.	Lectures and Tutorials	H.W, Quizzes & Exams
3	3	1 & 2	Job activities and logic (WBS).	Lectures and Tutorials	H.W, Quizzes & Exams
4	3	1 & 3	Planning techniques.	Lectures and Tutorials	H.W, Quizzes & Exams
5	3	1, 2, & 3	Activity on arrow (AOA)	Lectures and Tutorials	H.W, Quizzes & Exams
6	3	1, 2, & 3	Precedence diagrams (AON); Relationships	Lectures and Tutorials	H.W, Quizzes & Exams
7	3	1, 2, & 3	Estimating activity durations	Lectures and Tutorials	H.W, Quizzes & Exams
8	3	1, 2 & 4	Time calculations (Forward & Backward pass) Float calculations	Lectures and Tutorials	H.W, Quizzes & Exams
9	3	1, 2 & 4	Construction project scheduling	Lectures and Tutorials	H.W, Quizzes & Exams
10		1, 2 & 4	Line of balance technique	Lectures and Tutorials	H.W, Quizzes & Exams
11	3	1, 2 & 4	Resource scheduling and leveling/ Adding constraints	Lectures and Tutorials	H.W, Quizzes & Exams
12	3	3 & 4	Time – Cost relationship	Lectures and Tutorials	H.W, Quizzes & Exams
13	3	3 & 4	Cash flow forecasting	Lectures and Tutorials	H.W, Quizzes & Exams
14	3	5	Schedule monitoring and control	Lectures and Tutorials	H.W, Quizzes & Exams

References:

- 1) Jimmie W. Hinze, (2003) "Construction Scheduling", Second Edition. Prentice Hall;, 2003. ISBN: 0130928615.
- 2) Leslie Feigenbaum, (2010) "Project Planning Using Primavera Project Planner." Prentice Hall ISBN: 0137443765.

Assessment Methods:

Methods	Grade	Date
Exam 1	20	
Exam 2	20	10/5/2017
Quiz 1 + Quiz 2 + Homeworks	10	During the course

