|  |  |
| --- | --- |
|  | **King Saud University** **College of Engineering****Department of Civil Engineering** |

**GE 404: ENGINEERING MANAGEMENT**

**Summer Semester 1438/1439H (2017/2018)**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Topic** | **Reading Assignment** | **Duration “Weeks”** |
| **INTRODUCTION & PROJECT ORGANIZING** |
| 1a | Introduction for Engineering Management | Ch. 1 & Class Notes | 1 |
| 1b | Project Participants and Project Life Cycle  | Class Notes | 0.5 |
| **PROJECT PLANNING** |
| 2 | Project Time Planning: * Processes, and
* Bar (Gantt) Chart
 | Ch. 1 | 1 |
| 3 | Network Model: * Activity-On-Node (AON),
* Precedence Diagramming, and
* Time\_scaled network
 | Ch. 2 (pp. 37-43)Ch. 4 (pp. 93-107) | 2 |
| 4a | Resource Leveling and Allocation | Ch. 7 (pp. 191-210) | 1.5 |
| 4b | Resource Allocation | Class Note | 1 |
| 5 | Time-Cost Trade-Offs | Ch. 8 (pp. 237-249) | 1.5 |
| **PROJECT FINANCING AND CONTROL** |
| 6 | Contractual and Organizational Approaches | Ch. 1 & Class Notes | 0.5 |
| 7 | Financial Management: Cashflow Forecasting  | Class Notes | 1.5 |
| 8a | Time Control  | Ch. 5 (pp. 133-163) & Class Notes | 1 |
| 8b | Cost Control | Ch. 5 (pp. 133-163) & Class Notes | 1 |
| 9 | Analysis of Scheduling Delay | Class Notes | 1.5 |

**Textbook:** Project Management with CPM, PERT, and Precedence Diagramming, 3rd Edition, by Moder J., Phillips, C., and Davis, E.

**Grading:** Mid-term Exams 50%

 Assignments and Quizzes 10%

 Final Examination 40%