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

**GE 404: ENGINEERING MANAGEMENT**

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

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| **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%