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

**GE 404: ENGINEERING MANAGEMENT**

**1st Semester 1437/1438H-Fall- 2016**

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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 Leveling & Allocation using MS project software | 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 |

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| **First Mid-Term Exam: Tuesday** **23/01/1438H (25/10/2016G) from 6:00 to 7:30 PM****Second Mid-Term Exam: Tuesday 13/03/1438H (13/12/2016G) from 6:00 to 7:30 PM** |

**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%

**Semster Schedule**

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| **Week#** | **Week Start** | **Toipc** |
| **Day** | **Date (Geo.)** | **Date (Hijri)** |
| **1** | **Sunday** | **18/9/2016** | **16/12/1437** | -- |
| **2** | **Sunday** | **25/9/2016** | **23/12/1437** | Intrduction |
| **3** | **Sunday** | **2/10/2016** | **30/12/1437** | Bar Chart |
| **4** | **Sunday** | **9/10/2016** | **7/1/1438** | AON |
| **5** | **Sunday** | **16/10/2016** | **14/1/1438** | Precedence & Time-scaled network |
| **6** | **Sunday** | **23/10/2016** | **21/1/1438** | Resource Leveling |
| **First Midterm**  | **Tuesday**  | **25/10/2016** | **23/01/1438** | 1st Exam |
| **7** | **Sunday** | **30/10/2016** | **28/1/1438** | Resource Allocation |
| **8** | **Sunday** | **6/11/2016** | **5/2/1438** | MS project for Resource leveling & Allocation |
| **Midterm break** | **Sunday** | **13/11/2016** | **12/2/1438** | University closed  |
| **9** | **Sunday** | **20/11/2016** | **19/2/1438** | Contractual and Organizational Approaches |
| **10** | **Sunday** | **27/11/2016** | **26/2/1438** | Time-Cost Trade-Offs |
| **11** | **Sunday** | **4/12/2016** | **4/3/1438** | Contractual and Organizational Approaches |
| **12** | **Sunday** | **11/12/2016** | **11/3/1438** | Financial Management |
| **Second Midterm**  | **Tuesday**  | **13/12/2016** | **13/03/1438** | 2nd Exam |
| **13** | **Sunday** | **18/12/2016** | **18/3/1438** | Time Control |
| **14** | **Sunday** | **25/12/2016** | **25/3/1438** | Cost Control |
| **15** | **Sunday** | **1/1/2016** | **2/4/1438** | Analysis of Scheduling Delay |
| **Final Exam** |  |  |  | **To Be annoced by Colleage** |