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**KING SAUD UNIVERSITY**

**COLLEGE OF ARCHITCTURE AND PLANNING**

**Department of Architecutre and Building Sciences**

**ARCH 435: Project Management**

**First Semester 1433/1434H**

**Course Description:**

Managing construction projects during the different construction stages: planning, scheduling, and control. In addition to resouce leveling and contractual and organizational approaches, introduction to value engineering, and computer applications.

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| **No** | **Topic** | **Weeks** | **Notes** |
| 1 | Introduction to Project Management | 1 |  |
| 2 | Project Participants and Life-Cycle  | 2 |  |
| 3 | Project Time Planning: Gantt (Bar) Chart | 3 | Assigment 1 |
| 4 | Network Model:* Activity-On-Arrow (AOA),
 | 4 | Assigment 2 |
| 5 | Network Model:* Activity-On-Node (AON),
* Precedence Diagramming and PERT
 | 5,6 | Assigment 3 |
| 6 | Resource Leveling and Allocation | 7 | Assigment 4 |
| 7 | Time-Cost Trade-Offs | 8 | Assigment 5 |
| 8 | Financial Management: Cash-flow | 9 | Assigment 6 |
| 9 | Construction Contracts | 10 |  |
| 10 | Time & Cost Control | 11 | Assigment 7 |
| 11 | Introduction to Value Engineering | 12 |  |
| 12 | Value Engieering Job Plan | 13 |  |
| 13 | Final Exam | 14 |  |

**Grading:**

* Assignments and Quizzes 30%
* Mid-term Exam 25%
* Attendance and Participation 5%
* Final Examination 40%

**References:**

* Maylor, Harvey, Project Management, Pearson Education Limited, England, 4e 2008.
* Nicholas, John M., and Steyn, Herman “Project Management for Business, Engineering, and Technology” Elsevier Ltd, 2008.
* Project Management with CPM, PERT, and Precedence Diagramming, 3rd Edition, by Moder J., Phillips, C., and Davis, E.