**DEPARTMENT \_Software Engineering\_\_\_\_\_\_\_\_\_**

Course Code: SE-310 Course Title: Software Project Management Teacher Name: Dr. Sh. M. Wahabuddin Usmani

Semester: Spring/~~Fall~~ Academic Session: 2022 Class: ~~1~~~~st~~~~/2~~~~nd~~/3rd/~~4~~~~th~~ ~~(Final)/5~~~~th~~ ~~(Final)~~ Year

No. of sections: \_02\_\_\_\_\_ No of contact hours per week per section: \_\_\_03\_\_\_\_

**TEACHING TOOLS**

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| --- | --- | --- |
| 🞏 Problem-based learning | 🞏 Mini-project | ◼ Case studies |
| 🞏 Innovative solution | 🞏 Group activity | 🞏 Entrepreneurial activities |
| 🞏 Industrial visit | 🞏 Student presentation | ◼ Other Quizzes |

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| --- | --- | --- |
| **WEEK No.** | **TOPICS** | **NO. OF PERIODS** |
|  | Introduction and History of SPM, Overview of Project Management | 3 |
|  | Software Crisis and Software Engineering | 3 |
|  | Classic Mistakes | 3 |
|  | Software project Phases | 3 |
|  | Project charter, Statement of Work (SOW) | 3 |
|  | Planning Phase: Development lifecycle models, matching lifecycles to projects, Project plans | 3 |
|  | Work Breakdown Structures (WBS), Estimation of effort and cost (Expert Judgment, FP and Use Case point methods) | 3 |
|  | Scheduling: Project network diagram fundamentals, CPM, PERT, Gantt charts, Critical chain scheduling | 3 |
|  | Midterm & Review | 3 |
|  | Team models, Managing conflict and motivating | 3 |
|  | Project Monitoring and Control: Status reporting, Project metrics, Communications Techniques | 3 |
|  | Risk management and Change control Project Recovery | 3 |
|  | Documentation, Cutover/Migration, Post Project Reviews, Closing | 3 |
|  | PM Groups, Certifications etc. | 3 |
|  | Using MS-Project/PrimaVera Project Planner, Assigning Resources, Resource leveling – Other SPM specific tools | 3 |
|  | Revision | 3 |
|  | **Total per Semester:** | **45+3** |

**SESSIONAL CRITERIA**

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| --- | --- | --- |
| **Assessment Type** | **Marks** | **Schedule (Week No.)** |
| Quizzes / Assignments | 10 | Every 3rd/4th week |
| Mid Term | 20 | In 9th week |
| Assignment/Case Study | 10 | In 5th week |
| Final Examination | 60 | End of semester |
| **Total Sessional Marks** | **100** |  |

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| Prepared by: | Dr. Sh. M. Wahabuddin Usmani |  | Reviewed & Approved by: | Prof. Dr. Mirza Mahmood Baig |
| Date |  |  | Date |  |

**TEXTBOOKS (Book Name, Authors, edition, Publisher, Year):**

1. *“Software Project Management”*, Bob Hughes and Mike Cotterell , McGraw-Hill Higher Education, 4th Edition, 2005.
2. “*The Software Project Manager's Handbook - Principles that work at work”*, Dwayne Phillips, Wiley-IEEE Computer Society Press, 2nd Edition, 2004.

**Syllabus**

**SE-310 SOFTWARE PROJECT MANAGEMENT Credit Hours: 3**

Software Crisis and Software Engineering, Classic Mistakes, Overview of Project Management, PMI Process Groups, Software project Phases, Project charter, Statement of Work (SOW), Planning Phase: Development lifecycle models, matching lifecycles to projects, Project plans, Work Breakdown Structures (WBS), Estimation of effort and cost (Expert Judgment, FP and Use Case point methods), Scheduling: Project network diagram fundamentals, CPM, PERT, Gantt charts, Critical chain scheduling, Using MS-Project/PrimaVera Project Planner, Assigning Resources, Resource leveling, Team models, Managing conflict and motivating, Project Monitoring and Control: Status reporting, Project metrics, Communications Techniques, Risk management and Change control Project Recovery, Documentation, Cutover/Migration, Post Project Reviews, Closing.