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| **COURSE CODE& TITLE**  SE-310 Software Project Management | **SEMESTER**  🗹 SPRING 🞎 FALL 2022 | **CREDIT HOURS**  TH 🗹3 🞎2 🞏1 🞏0 PR 🞏3 🞏2 🞎1 🞏0 |
| **PREREQUISITE COURSE(S)**  Nil | **DATE OF APPROVAL** | **BATCH**  2019 |
| **COURSE CONTENTS**   |  |  |  |  | | --- | --- | --- | --- | | **S. No.** | **Topic** | **Contents** | **Remarks (if any)** | | **1** | Introduction | Introduction and History of SPM, Overview of Project Management |  | | **2** | Background | Software Crisis and Software Engineering |  | | **3** | Classic Mistakes | Classic Mistakes |  | | **4** | Project Phases | Software project Phases |  | | **5** | Agreement | Project charter, Statement of Work (SOW) |  | | **6** | Phases | Planning Phase: Development lifecycle models, matching lifecycles to projects, Project plans |  | | **7** | Effort Calculation | Work Breakdown Structures (WBS), Estimation of effort and cost (Expert Judgment, FP and Use Case point methods) |  | | **8** | Scheduling & Techniques | Scheduling: Project network diagram fundamentals, CPM, PERT, Gantt charts, Critical chain scheduling |  | | **9** |  | Midterm |  | | **10** | Teams | Team models, Managing conflict and motivating |  | | **11** | Monitoring & Control | Project Monitoring and Control: Status reporting, Project metrics, Communications Techniques |  | | **12** | Risk Management | Risk management and Change control Project Recovery |  | | **13** | Closing | Documentation, Cutover/Migration, Post Project Reviews, Closing |  | | **14** | Certification | PM Groups, Certifications etc. |  | | **15** | Tools | Using MS-Project/PrimaVera Project Planner, Assigning Resources, Resource leveling – Other SPM specific tools |  | | **16** |  | Revision |  | | | |
| **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. 3. PMI Body of Knowledge Latest edition available | | |
| **COURSE LEARNING OUTCOME AND ITS MAPPING WITH PROGRAMME LEARNING OUTCOME**   |  |  |  |  | | --- | --- | --- | --- | | **Sr. No.** | **CLOs** | **Taxonomy level** | **Programme learning outcome (PLO)** | | At the end of the course, the student will be able to: | | | | | **01.** | Will develop management skills and techniques to enable the student to overcome challenges associated with software projects and to successfully lead such projects and programs in today's complex systems environment. | C2  Comprehension | G11 Project Management | | **02.** | Will develop Skills to manage software Plan, cost, schedule and risk engineering | C3  Application | G2 Problem Analysis | | **03.** | Will develop skills to work effectively with stack holders for effective SPM | C3  Application | G9 Individual & Team Work | |  |  |  |  |   **REMARKS (if any):** | | |

**Recommended by : \_** **\_ Approved by :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

(Chairperson/Date) (Dean/Date)