AMITY UNIVERSITY
UTTAR PRADESH

Course Title: I.T. PROJECT MANAGEMENT Course Code: CSIT705 Credit Units: 03

Course Objectives:

L	T	P/S	SW/FW	TOTAL CREDIT UNITS
3	-	-	-	3

IT Project management is an area of project management that has an emphasis on computer technology. Often projects failure due to the approach towards its implementation. Software project management consists of the various methodologies and tools that assist in the successful completion and implementation of an Software project. This course covers the nitty-gritties of project management where students will learn what project management involves and how to approach it successfully.

Pre-requisites:

- Students should know the basic computing terminologies, Internet, software and hardware and use of Networking.
- Role of management, resources and effectiveness of system in overall accomplishment of organizational objectives.

Student Learning Outcomes:

- Upon successful completion of this course, the student will be able to identify and describe the key phases of project management and the key skills associated with each phase
- Understand and practice the process of project management and its application in delivering successful IT projects;
- Evaluate a project, define project scope, calculate effort and estimate complexity to execute projects at optimal cost and within schedule
- Identify the resources required for a project and to produce a work plan and resource schedule;
- Monitor and control the progress of a project and to assess the risk associated.

Course Contents/Syllabus:

	Weightage (%)
Module I Introduction to Project, Project Management and IT Project Management. Project dimensions, Portfolio Management, Program Management, and Relationship between Project, Program and Portfolio Management. Project vs. Operations Management, PMO Functions, Enterprise environmental factors. Role of Project Manager and Competences of Software Project Manager, Stakeholders, Project Roles, Role of Organisations Culture, Style and Structure on Project Management, Product and Project Life cycle. Process Overview, Project Management Process Interaction, Introduction to PMI Process Groups and Knowledge Areas, Project and Product Life cycles. Software Development Product Life Cycle Processes and Activities, SDLC selection criteria.	**20**
Module II Project Charter, Develop Project Management Plan, Direct and Manage Project Execution, Monitor and Control project work, Perform Integrated Project control, Close project or phase. Define goal and scope, Verify scope, Control Scope, Flexibility Matrix, Creating Project Charter, SPMP, Approaches to create WBS. Define Activities, Sequence Activities, Dependencies consideration, Estimate Activity Resources, Estimate Activity Duration, and Activities for various Life Cycle Models.	**20**
Module III Different Size Measures, process of Estimating the Size of a software, Reuse Estimation, LOC, Function points. Scheduling fundamentals, Gantt Charts Control Schedule, PERT, CPM Scheduling Levelling Resource Assignment, Crashing and Fast Tracking. Implementation on MS Project 2010.	**20**
Module IV Project Cost Management, Effort Measures, Types of Cost Estimates Model, Cost Estimation Tools and Techniques, COCOMO Cost Estimation Model, Problems with Cost Estimation, Cost Budgeting, Preparing Cost Baseline. Project Progress Management - Earned Value Management and Earned Value Tracking.	**15**
Module V Risk Management Introduction, Risk Management Models, Risk Identification, Analysing and Quantifying Risks. Monitoring and Controlling Risks, Risk Categories, Sensitivity Analysis, Risk response Planning Developing Risk Management Plan. Quality planning, Quality Assurance, Quality Control, Total Cost of Quality, Building SQAP. Keys to Managing People, HRP, Acquiring, developing and managing the Project Team, Resource Assignment, Loading and Levelling. Communication Planning, Information Distribution, Performance Reporting, Managing Stakeholders. Planning purchase and acquisition, Planning Contracting, Administering the Contract and Closing the Contract. Identification of objects in s/w conf., version control, change control, configuration audit, status reporting. Handling challenges of Large Projects.	**20**

Pedagogy for Course Delivery:

The class will be taught using theory and case based method. In addition to assigning the case studies, the course instructor will spend considerable time in understanding the concept of innovation through the eyes of the consumer. The instructor will cover the ways to think innovatively liberally using thinking techniques.

Lab/ Practicals details, if applicable: NA

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)	End Term Examination
100%	NA	70

Theory Assessment (L&T):

Continuous Assessment/Internal Assessment					End Term Examination
Components (Drop down)	Mid-Term Exam	Project	Viva	Attendance	
Weightage (%)	10%	10%	5%	5%	70%

Lab/ Practical/ Studio Assessment:

	Continuous Assessment/Internal Assessment				End Term Examination		
Components (Drop down							
Weightage (%)							

Text & References

1. PMI-PMBOK 4th Edition
2. Shaffer & Shaffer(2006),Quality Software Project Management, Pearson Education.
3. Hughes B & Cotterell M (2010), Software Project Management, Tata McGraw-Hill
4. Leffingwell D (2009), Managing Software Requirements: A Unified Appr
5. Henry J (2009), Software Project Management, Pearson Education