Title (Units): **COMP7550 IT Project Management (3,3,0)**

Course Aims: The objective of this course is to study the concepts and issues related with management of information technology projects. On completion of the course, students should: (i) have acquired basic skills for project managers, (ii) be able to develop and prepare project plans for effective resource utilization, and (iii) be able to manage IT development projects.

Prerequisite: Nil

Course Intended Learning Outcomes (CILOs):
Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Explain the basic concepts in Project Management
2	Explain the Project Management Techniques
3	Explain the Project Management Components, Issues, and Considerations
4	Illustrate how Agile and Hybrid Project Management is applied in the industry
	Professional Skill
5	Effectively develop and prepare project plans
6	Effectively manage IT development projects

Calendar Description: This course deals with project management and addresses issues in information technology project development. On completion of the course, students should: (i) have acquired basic skills for project managers, (ii) be able to develop and prepare project plans for effective resource utilization, and (iii) be able to manage IT development projects.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1,2,3,4,5	Students will attend lectures to learn the basic principles of IT project management. They will participate in class discussions and presentations, and problem-solving tasks for in-depth learning.
3,5,6	Students will work on term papers to consolidate and apply what they have learnt.

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Continuous Assessment	40%	1,2,3,4,5,6	It will normally include presentations and participation in group discussions, and term papers. They are designed to test students' understanding in the Knowledge and Skills domains.
2	Examination	60%	1,2,3,4	Final examination questions are designed to assess students' understanding of important concepts and their ability in applying these concepts to solve problems.

Assessment Rubrics:

Criteria	Excellent (A)	Good (B)	Satisfactory (C)	Fail (F)
Research efforts (*if appropriate*)	Good quality and range of materials from research;	Good quality research and/or documentation	Some but insufficient research and/or documentation	No research data presented

Criteria	Excellent (A)	Good (B)	Satisfactory (C)	Fail (F)
	research documentation; bibliography;			
Accuracy and analysis of ideas from case and/or research	Accurate and precise analysis; excellent Integration of ideas; assumptions are stated clearly	Good analysis with some exceptions; some integration of ideas	Fair but some inaccurate analysis; insufficient integration of ideas; no statement of assumptions	No analysis; no stated assumptions
Organization and clarity of presentation	Excellent organization of presentation of ideas; good attitude of work e.g. formats, tables, page layouts	Good clarity of presentation; fair attitude	Insufficient clarity of presentation; fair attitude	Bad attitude of work;

Course Content and CILOs Mapping:

Content		CILO No.
I	Project Management Principles	1
II	Project Management Techniques	2
III	Budget Planning	3,4,5,6
IV	Project Scheduling	3,4,5,6
V	Capability Maturity Models	3,4,5,6
VI	Project Management Development Life Cycle	3,4,5,6
VII	Special Topics in Project Management	3,4,5,6

References:

- Todaro, D., The Epic Guide to Agile: More Business Value on a Predictable Schedule with Scrum, R9 Publishing LLC, 2019.
- Jack R Meredith, Samuel J Mantel Jr., Scott M Shafer and Margaret M Sutton, Project Management in Practice, 7th Edition, Wiley, 2020.
- Erik Larson and Clifford Gray, The Managerial Process with MS Project, McGraw-Hill, 2013.
- Schwalbe, K., Information Technology Project Management, 9th Edition, Cengage Learning, 2018.
- Project Management Institute, A Guide to the Project Management Body of Knowledge: PMBOK, 7th Edition, Project Management Institute, 2021.
- Mary B Chrissis, Mike Konrad and Sandra Shrum, CMMI for Development: Guidelines for Process Integration and Product Improvement, Addison-Wesley Professional, 2011.
- Eric Verzuh, The Fast Forward MBA in Project Management (Fast Forward MBA Series), 6th Edition, Wiley, 2021.
- Jack R Meredith and Samuel J Mantel Jr., Project Management: A Managerial Approach, 11th Edition, Wiley, 2021.
- Joseph Phillips, IT Project Management: On Track from Start to Finish, 3rd Edition, McGraw-Hill, 2010.
- James Cadle and Donald Yeates, Project Management for Information Systems, Prentice Hall, 2008.
- Lead, J., Project Management: This book includes: Lean Guide + Agile Project Management. Practical guide for Managing Projects, Productivity, Profits of Enterprises or Startups with Lean, Scrum, Agile, Indalo Ltd, 2020.
- Herring, H., Agile Project Management: The New Step by Step Guide to Learn the Kanban Process, Scrum and Lean Thinking, Olivia Burn, 2019.
- Nizhebetskyi, D., Practical Project Management: Proven Framework That Great Project Managers Use In the Real World, Independently published, 2022.
- Simon, P., Project Management in the Hybrid Workplace, Racket Publishing, 2022.
- Wysocki, R.K., Effective Project Management: Traditional, Agile, Extreme, Hybrid, 8th Edition, Wiley, 2019.

Course Content:

Topic

I. Project Management Principles
   A. Basic skills for project managers
   B. Project planning and reporting
   C. Project teams

II. Project Management Techniques
   A. Project Management Methodologies
   B. Managing Rapid Application Development
   C. Managing Risks
   D. Managing Problems
   E. Other Techniques

III. Budget Planning
   A. Estimating Manpower Costs
   B. Material Costs
   C. Planning and Estimating Capital Equipment Costs
   D. Allocating Overhead Costs
   E. Roll-out Planning and Implementation Phase
   F. Benefit Cost Analysis

IV. Project Scheduling
   A. PERT
   B. Gantt Chart
   C. Critical Path

V. Capability Maturity Models
   A. Concepts, Structure and Usage
   B. Key Practices for Software
   C. Integrated Process Improvement
   D. Capability Maturity Model Integration

VI. Project Management Development Life Cycle
   A. Project Planning Phase
   B. Analysis and Design Phase
   C. Construction Phase
   D. Test Planning and Preparation
   E. Roll-out Planning and Implementation Phase

VII. Special Topics in Project Management
   A. Knowledge Management
   B. Project Management and the Internet
   C. Current Issues (e.g. Agile & Hybrid Project Management)