COURSE INFORMATION

School/Faculty:	Computing	**Page:**	1 of 4
Program name:	SCSJ		
Course code:	SCSJ2363	**Academic Session/Semester:**	202425/1
Course name:	Software Project Management	**Pre/co requisite (course name and code, if applicable):**	Nil
Credit hours:	3		

Course synopsis	This course is designed to provide students with in depth knowledge on software project planning, cost estimation and scheduling, project management tools, factors influencing productivity and success, productivity metrics, analysis of options and risks, software process improvement, software contracts and intellectual property and approaches to maintenance and long term software development. This course will incorporate a work-based learning approach where students will have some sessions with the industrial partners. At the end of this course, students should be able to know how to manage a software development life cycle.			
Course coordinator (if applicable)				
Course lecturer(s)	**Name**	**Office**	**Contact no.**	**E-mail**
	PM Dr Mohd Shahizan Othman	N28a, level 2, Applied Computing Department	012-7363269	shahizan@utm.my

Mapping of the Course Learning Outcomes (CLO) to the Programme Learning Outcomes (PLO), Teaching & Learning (T&L) methods and Assessment methods:

No.	CLO	PLO (Code)	Taxonomies and generic skills	T&L methods	*Assessment methods
CLO1	Apply knowledge of project management and its context to IT projects	PLO1 Knowledge & understanding	C3	Lecture, Active learning, Technology tools	AA, CSA
CLO2	Demonstrate leadership and responsibility in a group project management tasks which is integrating the concepts, tools and techniques into various components of project management (PMBOK).	PLO8 Leadership, autonomy & responsibility	LAR	Lecture, Active learning, Technology Tools	GP, GA

Prepared by:	Certified by:
Name:	Name: PM Dr Roliana
Signature:	Signature: 
Date:	Date: 12 November 2020

CLO3	Design IT project management elements into computer-based project management tools.	PLO6 Digital skills	DS	Lecture, Active learning	GP
CLO4	Work and communicate effectively in a team and able to produce a written report	PLO5 Communication Skills	CS1	Active learning	PR

* IFP – Individual Final Project (Equivalent with Final Exam); CAD – Case Analysis and Discussion; GP – Group Project; PR – Presentation; GA – Group Assignment; THE – Take Home Examination.

Details on Innovative T&L practices:

No.	Type	Implementation
1.	Lecture	Lecture deliver in class
2.	Active learning	Conducted through in-class activities such as case study, discussion, active review session and problem solving.
3.	Technology tools	Conducted through the use of Kahoot, Prezi, Microsoft Projects

Weekly Schedule:

Week 1	**Introduction to Software Project Management (SPM)** - The Fundamental Concepts of SPM - Project Conceptualization: Project Definition, Selection, ToR, Vision, Mission, Objective & Scope - Project Types, Characteristics, Life Cycle & Stakeholders - Project Management Process Groups - The Concepts of Management Control in SPM - The Challenges in SPM - Information Technology Context and Process
Week 2	**Software Agile Project Management Principle** - The fundamental and application of agile project principle - The concepts of project identification, analysis, treatment and monitoring - Documenting planning
Week 3	**Software Agile Project Management Process** - Dynamic Systems Development Method (DSDM) Process - Scrum, Kanban, and Scrumban - Project Management Tools: Tools & Charts, Network Diagrams & Gantt Charts
Week 4	**Software Agile Planning and Control** - Project Planning Concepts - Testing Concepts - Tracking and Control Concepts - Planning throughout the Life cycle - Task Boarding on Project Management Information System - Planning and Quality - Project Cost Management: Budgeting, Cost Estimation - Project Risk Management: Scenario Planning, Analysis & Management

Week 5	**Practical application of Agile PM principles** - The MoSCoW Rules - MoSCoW Relating to a Specific Timeframe - DSDM Practice: Timeboxing - The Daily Stand-up (Scrum)
Week 6	**Software Effort and Cost Estimation** - Understanding Software Effort Estimation Basics - Factors Affecting Software Development Costs - Proven Techniques for Estimating Project Budgets: Function Points (FP) & COCOMO (Constructive Cost Model)
Week 7	**Security in Software Project Management** - Service Level Agreement - Integration of Information Security - Use of Security Tools - Backup and Recovery Plans

Transferable skills (generic skills learned in course of study which can be useful and utilised in other settings):

- Critical Thinking and Problem-Solving Skills
- Ethics, Values and Professionalism Skills
- Communication Skills

Student learning time (SLT) details:

Distribution of student Learning Time (SLT) Course content outline	Guided Learning (Face to Face)				Teaching and Learning Activities		TOTAL SLT
					Guided Learning Non-Face to Face	Independent Learning Non-Face to face	
CLO	**L**	**T**	**P**	**O**			
CLO 1	15h	5h		2h	12h	18h	52h
CLO 2	3h	3h		4h	6h	14h	30h
CLO 3	2h	4h		2h	5h	11h	24h
CLO 4	0h			2h	3h	7h	12h
Total SLT	20h	12h		10h	26h	50h	118h

L: Lecture, T: Tutorial, P: Practical, O: Others

Continuous Assessment		PLO	Percentage	Total SLT
1.	Case Study Analysis (CSA)	PLO1	15	As in CLO2 (18h)
2.	Group Project (GP)	PLO6, PLO8	25	As in CLO3 (25h)
3.	Presentation (PR)	PLO5	10	As in CLO4 (12h)
4.	Group Assignment (GA)	PLO8	20	As in CLO2 (13h)
5.	Final Examination	PLO1	30	As in CLO1 (52h)
Grand Total			**100**	**120h**

Special requirement to deliver the course (e.g.: software, nursery, computer lab, simulation room):

Software: Microsoft Projects

Learning resources:

Text book (if applicable)

Main references

- Grey, S. (2020). *Practical risk assessment for project management*. Wiley.
- Mislick, G. K., & Nussbaum, D. A. (2018). *Cost estimation: Methods and tools*. Wiley.
- Hughes, B., & Cotterell, M. (2009). *Software project management* (5th ed.). McGraw-Hill.

Academic honesty and plagiarism: *(Below is just a sample)*

Assignments are individual tasks and NOT group activities (UNLESS EXPLICITLY INDICATED AS GROUP ACTIVITIES) Copying of work (texts, simulation results etc.) from other students/groups or from other sources is not allowed. Brief quotations are allowed and then only if indicated as such. Existing texts should be reformulated with your own words used to explain what you have read. It is not acceptable to retype existing texts and just acknowledge the source as a reference. Be warned: students who submit copied work will obtain a mark of zero for the assignment and disciplinary steps may be taken by the Faculty. It is also unacceptable to do somebody else's work, to lend your work to them or to make your work available to them to copy.

Other additional information (Course policy, any specific instruction etc.):

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Disclaimer: