

COURSE INFORMATION

School / Faculty:	PPD / SPACE	Page:	1 of 5
Program Name	Diploma in Technology Management		
Course code:	DDWG2243	Academic Session/Semester:	2020/2021-1
Course name:	Technology Management	Pre/co requisite (course name and code, if applicable):	Nil
Credit hours:	3		

Course synopsis	This course is designed to introduce students to the basic theories of technology usage in business. The impact and types of technology life cycle, product development and innovation in technology in order to solve business problems.		
Course coordinator (if applicable)	Syarifah Rabiyah Al Adawiah Binti Syed Badrul Hisham		
Course lecturer(s)	Name	Office	Contact
	Mohd Azri bin Johan	Block H, Level 3, UTMKL	m_azri@utmpace.edu.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	Elucidate the meaning of technology and its importance.	PLO1	KW	Active learning	T, F
CLO2	Deduce the effects of technology towards business.	PLO2	AP	Active learning, Mini Scale Research	PR, T, F
CLO3	Explain technology life cycle, product development through the process of prototype, and innovation.	PLO3	PS	Active learning, Mini Scale Research	PR, T, F

Refer *Taxonomies of Learning and **UTM's Graduate Attributes, where applicable for measurement of outcomes achievement
 ***T – Test; Q – Quiz; HW – Homework; PR – Project; Pr – Presentation; F – Final Exam etc.

Details on Innovative T&L practices:

No.	Type	Implementation
1	Active learning	Conducted through in class activities, Case study, presentation, Problem based learning and Debate.
2	Mini Scale Research	Conducted through project. Students in a group have to develop a mini scale research related to their area of interest in technology management.

Prepared by: Name: Mohd Azri Bin Johan Signature:  Date: 18 th June 2020	Certified by: Name: Mohamad Shafie Bin Abdul Rashid Signature: Date: 18 th June 2020
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Weekly Schedule:

Week 1	<p>INTRODUCTION TO MANAGEMENT OF TECHNOLOGICAL INNOVATION</p> <ul style="list-style-type: none"> • The Importance Of Technological Innovation • The Impact of Technological Innovation on Society • Innovation by Industry: The Importance of Strategy
Week 2	<p>SOURCES OF INNOVATION</p> <ul style="list-style-type: none"> • Creativity • Translating Creativity Into Innovation • Innovation In Collaborative Networks
Week 3	<p>TYPES AND PATTERNS OF INNOVATION</p> <ul style="list-style-type: none"> • Types of Innovation • Technology S-Curves • Technology Cycles
Week 4	<p>STANDARDS BATTLES AND DESIGN DOMINANCE</p> <ul style="list-style-type: none"> • Dominant Designs • Multiple Dimensions of Value
Week 5	<p>TIMING OF ENTRY</p> <ul style="list-style-type: none"> • First-Mover Advantages and Disadvantages • Factors Influencing Optimal Timing of Entry • Strategies to Improve Timing Options
Week 6	<p>ORGANIZATION'S STRATEGIC DIRECTION</p> <ul style="list-style-type: none"> • Assessing the Firm's Current Position • Identifying Core Competencies and Capabilities 117 • Strategic Intent
Week 7	<p>CHOOSING INNOVATION PROJECTS</p> <ul style="list-style-type: none"> • The Development Budget • Quantitative and Qualitative Methods for Choosing Projects • Combining Quantitative and Qualitative Information
Week 8	MID SEMESTER BREAK
Week 9	<p>COLLABORATION STRATEGY</p> <ul style="list-style-type: none"> • Reasons for Going Solo and Advantages of Collaborating • Types of Collaborative Arrangements • Choosing a Mode of Collaboration • Choosing and Monitoring Partners
Week 10	<p>PROTECTING INNOVATION</p> <ul style="list-style-type: none"> • Patents, Trademarks, Copyrights and Trade Secrets • The Effectiveness and Use of Protection Mechanisms • Advantages of Protection

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Week 11	ORGANIZING FOR INNOVATION <ul style="list-style-type: none"> • Size and Structural Dimensions of the Firm • Structural Dimensions of the Firm • Modularity and “Loosely Coupled” Organizations • Managing Innovation Across Borders
Week 12	MANAGING NEW PRODUCT DEVELOPMENT PROCESS <ul style="list-style-type: none"> • Sequential Versus Partly Parallel • Customers And Suppliers Involvement • Tools for Improving the New Product Development Process • Tools for Measuring New Product Development Performance
Week 13	MANAGING NEW PRODUCT DEVELOPMENT TEAMS <ul style="list-style-type: none"> • Constructing New Product Development Teams • The Structure of New Product Development Teams • The Management of New Product Development Teams
Week 14	CRAFTING DEPLOYMENT STRATEGY <ul style="list-style-type: none"> • Launch Timing and Licensing & Compatibility • Pricing, Distribution and Marketing
Week 15	MINI RESEARCH PRESENTATION
Week 16	REVISION WEEK
Week 17-19	FINAL EXAMINATION WEEK

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

Skills in problem solving
Skills in analysis Item
Skills in conducting research

Student learning time (SLT) details:

Distribution of Student Learning Time (SLT) by CLO	Teaching and Learning Activities					SLT	
	Guided Learning (Face to Face) L: Lecture, T: Tutorial, P: Practical, O: Others				Guided Learning Non-Face to Face		Independent Learning Non-Face to face
CLO	L	T	P	O			
CLO1	10h	5h				15h	30h
CLO2	10h	8h				18h	36h
CLO3	6h	3h				9h	18h
Total SLT	26h	16h	0h	0h	0h	42h	120h

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No.	Continuous Assessment	PLO (Code)	Percentage	SLT
1	Assignment / Group Work	PLO 1, PLO 2	10	As in above SLT
2	Test	PLO 1, PLO 3	10	As in above SLT
3	Online Engagement	PLO 1, PLO 3	10	As in above SLT
4	Group project and presentation	PLO 1, PLO 2	10	As in above SLT
Final Assessment				
1	Final Examination	PLO1	60	2.5h
Total SLT			100	120h

h: hours

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

Lecture room with computer and LCD with internet connection

Learning resources:

Main reference :

Schilling, Melissa A. (2013) "Strategic Management of Technological Innovation", McGraw-Hill Education.

Additional references :

Mohd Nain, Ahmad Shukri and Md. Rasli, Amran (2005)"Pengurusan Teknologi", Universiti Teknologi Malaysia.

Dorf, Richard C. and Byers, Thomas H. (2008)"Technology Ventures From Idea to Enterprise", McGraw-Hill Education (Asia).

Online

<https://utmspace.blackboard.com/>

Academic honesty and plagiarism:

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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