

Tamkang University Academic Year 105, 2nd Semester Course Syllabus

Course Title	TECHNOLOGY MANAGEMENT	Instructor	LIN, CHANG-CHING
Course Class	TLQXM1A MASTER'S PROGRAM IN BUSINESS AND MANAGEMENT (ENGLISH-TAUGHT PROGRAM), 1A	Details	<ul style="list-style-type: none"> ◆ Selective ◆ One Semester ◆ 3 Credits
D e p a r t m e n t a l A i m o f E d u c a t i o n			
<p>I . Develop a business and management perspective for students.</p> <p>II . Train the professionals in the integrated fields of business and management.</p> <p>III . Cultivate the talents with both theory and practices in business and management.</p>			
D e p a r t m e n t a l c o r e c o m p e t e n c e s			
<p>A . Provide the basic knowledge of both theory and practices.</p> <p>B . Enhance the practical training for the current trends.</p> <p>C . Cultivate the ethics in business and management.</p> <p>D . Obtain the ability of analyzing industrial and business problems.</p>			
Course Introduction	<p>This course introduces the methodology of product design and development, which integrates prospective points from sales analysis, industrial design and manufacturing. Real world industrial cases are used in the course to describe and explain each stage of the design and development method. Students are required to develop a product concept by using all the methods learned from the class and present them as a term project in the end of the course. Finally, modular designed style makes this course suitable for MBA, industrial design and engineering graduated students.</p>		

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I. Objective Levels (select applicable ones) :

- | | | |
|-------------------------|-------------------------------------|---------------------------|
| (i) Cognitive Domain | : C1-Remembering, C2-Understanding, | C3-Applying, |
| | C4-Analyzing, C5-Evaluating, | C6-Creating |
| (ii) Psychomotor Domain | : P1-Imitation, P2-Mechanism, | P3-Independent Operation, |
| | P4-Linked Operation, P5-Automation, | P6-Origination |
| (iii) Affective Domain | : A1-Receiving, A2-Responding, | A3-Valuing, |
| | A4-Organizing, A5-Characterizing, | A6-Implementing |

II. The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

- (i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.
- (ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3, C5, and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)
- (iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A, AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	Students may understand the procedure of product development project, and its organization and implementing steps.	C2	AB
2	Students can implement their learned skills to execute a product development term project and present their results in the end of the course.	P6	AD

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Students may understand the procedure of product development project, and its organization and implementing steps.	Lecture, Discussion	Written test, Report
2	Students can implement their learned skills to execute a product development term project and present their results in the end of the course.	Lecture, Discussion, Appreciation	Written test, Report, Participation

This course has been designed to cultivate the following essential qualities in TKU students

Essential Qualities of TKU Students	Description
◆ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◆ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◆ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◆ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◆ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◆ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

Course Schedule

Week	Date	Subject/Topics	Note
1	106/02/13 ~ 106/02/19	Introduction	ch1
2	106/02/20 ~ 106/02/26	Development Processes and Organizations	ch2
3	106/02/27 ~ 106/03/05	Opportunity Identification	ch3
4	106/03/06 ~ 106/03/12	Product Planning	ch4
5	106/03/13 ~ 106/03/19	Identifying Customer Needs	ch5
6	106/03/20 ~ 106/03/26	Product Specifications	ch6
7	106/03/27 ~ 106/04/02	Concept Generation, Concept Selection	ch7, ch8
8	106/04/03 ~ 106/04/09	Spring break	
9	106/04/10 ~ 106/04/16	Concept Testing, Prototyping	ch9, ch14
10	106/04/17 ~ 106/04/23	Midterm Exam Week	
11	106/04/24 ~ 106/04/30	Product Architecture	ch10
12	106/05/01 ~ 106/05/07	Industrial Design	ch11

13	106/05/08 ~ 106/05/14	Design for Environment	ch12
14	106/05/15 ~ 106/05/21	Design for Manufacturing	ch13
15	106/05/22 ~ 106/05/28	Patents and Intellectual Property	ch16
16	106/05/29 ~ 106/06/04	Product Development Economics	ch17
17	106/06/05 ~ 106/06/11	Managing Projects	ch18
18	106/06/12 ~ 106/06/18	Final Exam Week	
Requirement			
Teaching Facility	Computer, Projector		
Textbook(s)	Product Design and Development, Fifth Edition, Karl T. Ulrich, Steven D. Eppinger, Mcgraw Hill.		
Reference(s)			
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 20.0 % ◆ Mark of Usual : % ◆ Midterm Exam : 30.0 % ◆ Final Exam : 30.0 % ◆ Other 〈Case Study Project〉 : 20.0 %		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php . ※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.		