Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	TRIZ APPLICATION	Instructor	TRAN, HUU KHOA
Course Class	TLMXM1A MASTER'S PROGRAM, DEPARTMENT OF INFORMATION MANAGEMENT, 1A	Details	◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG9 Industry, Innovation, and Infrastructure		

Departmental Aim of Education

Devoting to the integration and research of information technology and business management knowledge, and cultivating, for the society, middle and higher level managers with both information capabilities and modern management skills.

Subject Departmental core competences

A. Use of modern management knowledge.(ratio:10.00)

B. Logical thinking.(ratio:25.00)

C. Critical analysis.(ratio:5.00)

D. Integration of information technology and business management.(ratio:20.00)

E. Research and innovation.(ratio:25.00)

F. Theory and applications of data analysis.(ratio:5.00)

G. Information and communication security management.(ratio:5.00)

H. Verbal and Writing Communication skills.(ratio:5.00)

Subject Schoolwide essential virtues

1. A global perspective. (ratio:20.00)

2. Information literacy. (ratio:30.00)

3. A vision for the future. (ratio:10.00)

4. Moral integrity. (ratio:5.00)

5. Independent thinking. (ratio:10.00)

6. A cheerful attitude and healthy lifestyle. (ratio:5.00)

7. A spirit of teamwork and dedication. (ratio:10.00)

8. A sense of aesthetic appreciation. (ratio:10.00)

Course Introduction	Module TRIZ offers an introduction to some of the most cutting-edge inventive problem solving techniques. TRIZ provides you with the technical system evolution understanding and different of 40 principles to solve contradictions in technical system. The main goals are the creative thinking elaboration, inventive problem solving competence acquisition.

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.
II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.
III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Obtain knowledge of Theory of Inventive Problem Solving	Cognitive
2	Identify 40 principles where it can apply.	Psychomotor
3	Keeping abreast of the developments and applications of information communication and technology.	Affective

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	BCDE	12358	Lecture, Discussion	Discussion(including classroom and online), Report(including oral and written)
2	ABCDEFGH	12345678	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Report(including oral and written)
3	BCDE	12358	Lecture, Discussion	Study Assignments, Discussion(including classroom and online), Report(including oral and written)

Course Schedule			
Week	Date	Course Contents	Note
1	112/09/11 ~ 112/09/17	Introduction TRIZ	
2	112/09/18 ~ 112/09/24	Principles 1-2	
3	112/09/25 ~ 112/10/01	Principles 3-6	
4	112/10/02 ~ 112/10/08	Field Trip	
5	112/10/09 ~ 112/10/15	Principles 7-8	
6	112/10/16 ~ 112/10/22	Principles 9-11	
7	112/10/23 ~ 112/10/29	Principles 12-14	
8	112/10/30 ~ 112/11/05	Principles 15-18	
9	112/11/06 ~ 112/11/12	Principles 19-21	
10	112/11/13 ~ 112/11/19	Midterm Exam Week	
11	112/11/20 ~ 112/11/26	Principles 22-24	
12	112/11/27 ~ 112/12/03	Principles 25-28	
13	112/12/04 ~ 112/12/10	Principles 29-31	
14	112/12/11 ~ 112/12/17	Principles 32-34	
15	112/12/18 ~ 112/12/24	Principles 35-37	
16	112/12/25 ~ 112/12/31	Principles 38-40	
17	113/01/01 ~ 113/01/07	Project Presentation	
18	113/01/08 ~ 113/01/14	Final Exam Week	
Key capabilities		self-directed learning Problem solving Interdisciplinary	
Interdisciplinary		STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)	

Distinctive teaching	Project implementation course
Course Content	Logical Thinking
Requirement	
Textbooks and Teaching Materials	Self-made teaching materials:Handouts Using teaching materials from other writers:Handouts
References	Selected Papers, resources.
Grading Policy	◆ Attendance： 10.0 % ◆ Mark of Usual： % ◆ Midterm Exam： % ◆ Final Exam： % ◆ Other〈Presentation〉：90.0 %
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.**