

Tamkang University Academic Year 114, 1st Semester Course Syllabus

Course Title	TRIZ APPLICATION	Instructor	TRAN, HUU KHOA
Course Class	TGLXM0A ELECTIVES COURSES BY COLLEGE OF BUSINESS AND MANAGEMENT-MASTER, 0A	Details	♦ General Course ♦ Selective ♦ One Semester ♦ 3 Credits
Relevance to SDGs	SDG9 Industry, Innovation, and Infrastructure		
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			
I . Acquisition of professional knowledge. II. Learning effective self-planning. III. Theoretical application of practical matters. IV. Interpersonal communication and teamwork. V . Analysis of problems and recommendations. VI. Awareness of Ethics as a global citizen.			
Subject Departmental core competences			
A. Students can demonstrate that they have program advanced knowledge of business and management.(ratio:20.00) B. Students can demonstrate that they have analytical and problem-solving capability. (ratio:25.00) C. Students can demonstrate their oral and written communication skills.(ratio:20.00) D. Students can demonstrate team and interpersonal skill.(ratio:15.00) E. Students are able to demonstrate effective considerations of ethical issues in business situation.(ratio:20.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:15.00) 2. Information literacy. (ratio:15.00) 3. A vision for the future. (ratio:15.00) 4. Moral integrity. (ratio:5.00) 5. Independent thinking. (ratio:15.00)			

6. A cheerful attitude and healthy lifestyle. (ratio:15.00)

7. A spirit of teamwork and dedication. (ratio:5.00)

8. A sense of aesthetic appreciation. (ratio:15.00)

**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	ABCDE	12345678	Lecture, Discussion	Discussion(including classroom and online), Report(including oral and written)
2	ABCDE	12345678	Lecture, Discussion, Practicum	Study Assignments, Discussion(including classroom and online), Report(including oral and written)

3	ABCDE	12345678	Lecture, Discussion	Study Assignments, Discussion(including classroom and online), Report(including oral and written)
Course Schedule				
Week	Date	Course Contents		Note
1	114/09/15 ~ 114/09/21	Introduction TRIZ		
2	114/09/22 ~ 114/09/28	TRIZ in application		
3	114/09/29 ~ 114/10/05	Principles 1-2		
4	114/10/06 ~ 114/10/12	Principles 3-6		
5	114/10/13 ~ 114/10/19	Principles 7-8		
6	114/10/20 ~ 114/10/26	Principles 9-11		
7	114/10/27 ~ 114/11/02	Principles 12-14		
8	114/11/03 ~ 114/11/09	Principles 15-18		
9	114/11/10 ~ 114/11/16	Principles 19-21		
10	114/11/17 ~ 114/11/23	Midterm Exam Week		
11	114/11/24 ~ 114/11/30	Principles 22-24		
12	114/12/01 ~ 114/12/07	Principles 25-28		
13	114/12/08 ~ 114/12/14	Principles 29-31		
14	114/12/15 ~ 114/12/21	Principles 32-34		
15	114/12/22 ~ 114/12/28	Principles 35-37		
16	114/12/29 ~ 115/01/04	Principles 38-40		
17	115/01/05 ~ 115/01/11	Project Presentation		
18	115/01/12 ~ 115/01/18	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	<p>◆ Attendance : 10.0 % ◆ Mark of Usual : % ◆ Midterm Exam : %</p> <p>◆ Final Exam : %</p> <p>◆ Other 〈Presentation〉 : 90.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.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.</p> <p>※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>