

## Tamkang University Academic Year 111, 2nd Semester Course Syllabus

Course Title	OPERATIONS RESEARCH	Instructor	HSU-HUA LEE
Course Class	TLGXB2B DEPARTMENT OF MANAGEMENT SCIENCES, 2B	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Required</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG3 Good health and well-being for people		
Departmental Aim of Education			
<ul style="list-style-type: none"> <li>I. Become proficient at Management Sciences skills.</li> <li>II. Learn about self-development and personal growth.</li> <li>III. Make connections between theory and practice.</li> <li>IV. Enhance team cooperation and communication.</li> <li>V. Cultivate analytical and decision making skills.</li> <li>VI. Value the sustainable operation of organizations.</li> </ul>			
Subject Departmental core competences			
<ul style="list-style-type: none"> <li>A. Business management ability.(ratio:30.00)</li> <li>B. Marketing and logistic management ability.(ratio:30.00)</li> <li>C. Statistical analysis and Decision Making Ability.(ratio:20.00)</li> <li>D. Finance and economics analysis ability.(ratio:5.00)</li> <li>E. Teamwork ability.(ratio:5.00)</li> <li>F. Self-management ability.(ratio:5.00)</li> <li>G. Ethics application ability.(ratio:5.00)</li> </ul>			
Subject Schoolwide essential virtues			
<ul style="list-style-type: none"> <li>1. A global perspective. (ratio:5.00)</li> <li>2. Information literacy. (ratio:30.00)</li> <li>3. A vision for the future. (ratio:30.00)</li> <li>4. Moral integrity. (ratio:5.00)</li> <li>5. Independent thinking. (ratio:15.00)</li> </ul>			

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

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

8. A sense of aesthetic appreciation. (ratio:5.00)

Course  
Introduction

To learn the theory and the practice of operations research in the relevant programmings.

**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	To learn the model development and optimization about operations research	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEFGH	12345678	Lecture, Discussion, Practicum	Testing, Study Assignments, Discussion(including classroom and online), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	112/02/13~ 112/02/19	The introduction of operations research	
2	112/02/20~ 112/02/26	The matrix concept and linear algebra	

3	112/02/27 ~ 112/03/05	The practice of operations research (1)	
4	112/03/06 ~ 112/03/12	The practice of operations research (2)	
5	112/03/13 ~ 112/03/19	The introduction of simplex method	
6	112/03/20 ~ 112/03/26	The simplex method (1)	
7	112/03/27 ~ 112/04/02	The simplex method (2)	
8	112/04/03 ~ 112/04/09	The simplex method (3)	
9	112/04/10 ~ 112/04/16	visit company	
10	112/04/17 ~ 112/04/23	Midterm Exam Week	
11	112/04/24 ~ 112/04/30	Optimization (1)	
12	112/05/01 ~ 112/05/07	Optimization (2)	
13	112/05/08 ~ 112/05/14	Optimization (3) or join management sciences conference on May 16 at Tamkang U.	
14	112/05/15 ~ 112/05/21	Optimization in operations	
15	112/05/22 ~ 112/05/28	The model development of operations research (1)	
16	112/05/29 ~ 112/06/04	The model development of operations research (2)	
17	112/06/05 ~ 112/06/11	Visit company	
18	112/06/12 ~ 112/06/18	Final Exam Week	
Requirement	Pay attention to the attendance and learning, and complete the assignments		
Teaching Facility	Computer, Projector		
Textbooks and Teaching Materials	Operations Research		
References	Operations research related papers and software		
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 15.0 %   ◆ Mark of Usual : 15.0 %   ◆ Midterm Exam : 30.0 % ◆ Final Exam : 40.0 % ◆ Other ( ) : %		

Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a>.</p> <p>※ <b>Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b></p>
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