

M.A. PROGRAM IN BUSINESS MANAGEMENT (WITH THESIS)
COURSE SYLLABUS FORM

Course Details					
Code				Academic Year	Semester
BM062				1	Elective
Title	T	A	L	ECTS	
Decision Theory	3	0	0	6	
Language	English				
Level	Undergraduate		Graduate	X	Postgraduate
Department / Program	Business Management				
Forms of Teaching and Learning	Face to face				
Course Type	Compulsory		Elective	X	
Objectives	The aim of this course is to enable students to develop solutions to business problems by using the methods in decision theory.				
Content	Introduction to decision theory, decision making under certainty, uncertainty and risk, decision trees and Bayes approach, game theory, basic information about multi-criteria decision making methods, analytical hierarchy process, analytical network process, VIKOR, TOPSIS, ELECTRE, PROMETHEE, MOORA, data envelopment analysis				
Prerequisites	-				
Coordinator	Asst. Prof. Dr. Mehmet Hakan ÖZDEMİR				
Lecturer(s)	-				
Assistant(s)	-				
Work Placement	-				
Recommended or Required Reading					
Books / Lecture Notes	<ul style="list-style-type: none"> - Tzeng, G. H., Huang, J.J., Multiple Attribute Decision Making Methods and Applications, 2011, CRC Press - Hwang, C.L., Yoon, K., Multiple Attribute Decision Making Methods and Applications, 1981, Springer - Özbek, A. , Çok Kriterli Karar Verme Yöntemleri ve Excel ile Problem Çözümü Kavram-Teori-Uygulama, 2017, Seçkin Yayıncılık 				
Other Sources	-				
Additional Course Material					
Documents	-				
Assignments	-				
Exams	-				
Course Composition					
Mathematics und Basic Sciences					40%
Engineering					%

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Engineering Design		%
Social Sciences		20%
Educational Sciences		%
Natural Sciences		%
Health Sciences		%
Expert Knowledge		40%

Assessment

Activity	Count	Percentage (%)
Midterm Exam	1	40
Quiz		
Assignments		
Attendance		
Recitations		
Projects		
Final Exam	1	60
Total		100

ECTS Points and Work Load

Activity	Count	Duration	Work Load (Hours)
Lectures	14	3	42
Self-Study	14	3	42
Assignments			
Presentation / Seminar Preparation			
Midterm Exam	1	48	48
Recitations			
Laboratory			
Projects			
Final Exam	1	48	48
Total Work Load			180
ECTS Points (Total Work Load / Hour)			6

Learning Outcomes

1	Students can decide under certainty, uncertainty and risk.
2	Students can use decision trees.
3	Students have basic knowledge about game theory.
4	Students can use various decision making methods frequently used in the literature.

Weekly Content

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1	Introduction to decision theory, decision making under certainty, uncertainty and risk
2	Decision trees and Bayes approach
3	Game theory
4	Game theory
5	Basic information about multi-criteria decision making methods
6	Analytical hierarchy process
7	Analytical network process
8	VIKOR
9	Mid-term exam
10	TOPSIS
11	ELECTRE
12	PROMETHEE
13	MOORA
14	Data envelopment analysis
15	Data envelopment analysis

Contribution of Learning Outcomes to Program Objectives (1-5)

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
1	4	5	5	5	5	5	5	4	4	5	5	5	5
2	4	5	5	5	5	5	5	4	4	5	5	5	5
3	4	5	5	5	5	5	5	4	4	5	5	5	5
4	4	5	5	5	5	5	5	4	4	5	5	5	5

Contribution Level 1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High

Compiled by: Asst. Prof. Dr. Mehmet Hakan ÖZDEMİR (Head of Sub-Department Quantitative Methods)

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