



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Multi-Criteria Decision Making							
Course Code		İŞLE526		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	127 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		An important part of decision-making problems in real life depends on multiple criteria or factors. As a result of these multi-criteria problems, it is usually necessary to decide one of the many alternatives or to list these alternatives. The aim of this course is to teach the students the methods of decision making which are multi criteria and to give decision making ability with this approach.							
Course Content		Multi-criteria decision making structure, Analytical Hierarchy Process, Analytical Network Process, DEMATEL Method, SWARA Method, COPRAS Method, WASPAS Method, VIKOR Method, TOPSIS Method, PROMETHEE Method, Integrated multiple criteria decision methods, Gray Relational Analysis method.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study, Problem Solving					
Name of Lecturer(s)		Assoc. Prof. Engin ÇAKIR							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Yıldırım, B. F. ve Önder, E. (2014). İşletmeciler, Mühendisler ve Yöneticiler için Operasyonel, Yönetimsel ve Stratejik Problemlerin Çözümünde Çok Kriterli Karar Verme Yöntemleri. Bursa: Dora Yayınları.
2	Yaralıoğlu, K. (2010). Karar Verme Yöntemleri. Ankara: Detay Yayıncılık.

Week	Weekly Detailed Course Contents	
1	Theoretical	Decision making problem and problem solving
2	Theoretical	Modelling the decision problem, constitution and normalization of data set
3	Theoretical	Multi-criteria decision making
4	Theoretical	ELECTRE, TOPSIS
5	Theoretical	Analytical Hierarchy Process (AHP), Analytical Network Process (ANP)
6	Theoretical	PROMETHEE
7	Theoretical	Midterm Exams
8	Theoretical	Midterm Exams
9	Theoretical	VIKOR
10	Theoretical	DEMATEL
11	Theoretical	Strategic Decision Making (Game Theory)
12	Theoretical	Strategic Decision Making (Lanchester Strategies)
13	Theoretical	Compromise Programming
14	Theoretical	System Design (De Novo Programming)

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Midterm Examination	1	25	1	26
Final Examination	1	30	1	31
Total Workload (Hours)				127
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	It determines the criteria that affect a problem.
2	Calculates criteria weights of multi-criteria problems using appropriate methods.
3	Multi-criteria problems can be solved by group decision making with expert opinions.
4	
5	

Programme Outcomes (*Business Administration Master's Without Thesis*)

1	To equip the students from different academic backgrounds with the theoretical and practical information in the fundamental fields of business (i.e. Production management, marketing, accounting and finance, management and organization, and quantitative me
2	Be able to make financial analysis in micro and macro level and develop skills in the analysis of the primary and secondary markets; evaluation of the financial structure of the firms and interpretation of accounting reports and financial statements.
3	Be able to use mathematical, statistical and econometric models in the field of business develop skills for interpreting quantitative data, using data in the decision making process and be able to use statistical forecasting methods
4	To have knowledge about the management techniques, be able to assume responsibility in dealing with unforeseeable and complex problems as an individual and group member and develop leadership and communication skills.
5	Be able to understand principles of marketing, marketing research, market share estimation, market segmentation, market positioning, target markets, marketing mix and the place of marketing department in a business organization, the concept of international

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	3	3	4	3	4
P2	2	5	3	5	3
P3	5	3	5	4	5
P4	3	4	3	2	2
P5	4	3	4	3	3

