



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Optimization and Research Techniques							
Course Code		İŞLE508		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		The course aims to increase students' knowledge optimization issues.							
Course Content		Processing issues related to optimization and Research Techniques.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)		Lec. Esin SAYIN							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
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Week	Weekly Detailed Course Contents	
1	Theoretical	Linear Programming and setting up models
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
2	Theoretical	Graphical Solutions in Models
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
3	Theoretical	Duality
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
4	Theoretical	Sensitivity Analysis
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
5	Theoretical	Parametric and Goal Programming
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
6	Theoretical	Integer Programming
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
7	Theoretical	WINQSB
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
8	Intermediate Exam	Midterm Exams
9	Theoretical	Transportation Models
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
10	Theoretical	Network Analysis
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
11	Theoretical	Inventory Models
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
12	Theoretical	Game Theory
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
13	Theoretical	Waiting Line Models
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
14	Theoretical	Markov Analysis and Decision Making
	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
15	Preparation Work	Ahmet Öztürk, Yöneylem Araştırması, Ekin Basım Yayın Dağıtım, Bursa-2009.
16	Final Exam	Final Exam



17	Final Exam	Final Exam
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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	To establish the model and the model of domination.
2	Establish a linear model to dominate the field of business issues
3	Implementation of the qualification program WINQSP
4	Implement a program of Lindo
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	5	5	4	3	2
P2	3	3	5	2	3
P3	4	4	3	3	5
P4	2	5	2	5	4
P5	3	3	4	4	3

