AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Operations Research						
Course Code	UEK521		Couse Level	Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	126 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course							
Course Content							
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation)				
Name of Lecturer(s)							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Ahmet Öztürk, Yöneylem Araştırmasına Giriş, Ekin Kitabevi, 2011.
2	Wayne L. Winston, Operations Research, Applications and Algorithms, Thomson Brooks/Cole, Australia,2004

Week	Weekly Detailed Course Contents	
1	Theoretical	Mathematical model and solution algorithm of the transportation problem
2	Theoretical	Initial solution algorithms
3	Theoretical	The most appropriate solution tecniques of transport models
4	Theoretical	Distortion and sensitivity analysis in transport models
5	Theoretical	Assignment model and sensitivity analysis
6	Theoretical	Traveling salesman problem and Introduction to network analysis
7	Theoretical	The shortest path problem, midterm
8	Theoretical	Maximum flow and critical path method
9	Theoretical	PERT analysis
10	Theoretical	Time-cost relationship on project planning
11	Theoretical	Basic concepts for deterministic and stochastic inventory model
12	Theoretical	Economic order quantity model
13	Theoretical	Inventory models of planned out of stocks quantity discount
14	Theoretical	Stocastic ınventory models

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	6	3	126
			Total Workload (Hours)	126
			[Total Workload (Hours) / 25*] = **ECTS**	5

25 hour workload is accepted as 1 ECTS

Learning Outcomes

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Programme Outcomes *(Applied Econometry Interdisciplinary Master)*

1	Will be able to collect data related to social and economic topics.
2	Will be able to get raw data ready for statistical and econometric analysis.
3	Will be able to build econometric models that describe the data generating process behind data.
4	Will be able to interpret the results that are obtained through econometric analysis.
5	Will be able to conduct an independent empirical research project from start to finish.

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

	L1	L2	L3	L4	L5	L6	L7	L8
P1	5	2	5	2	4	3	3	3
P2	5	3	3	5	2	5	2	4
P3	4	2	5	5	3	2	3	3
P4	2	3	3	4	4	3	4	2
P5	2	3	3	4	4	4	3	3