AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Quantitative Methods						
Course Code	İK387		Couse Level	First Cycle (Bachelor's Degree)			
ECTS Credit	6	Workload	150 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To teach the basic techniques of operations research and use these techniques for solving business problems and making right decisions.						
Course Content	This course deals with operations research topics such as decision-making, linear programming, duality, sensitivity analysis, operations research, integer linear programming.						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Discussion, Individual Study				
Name of Lecturer(s)	Assoc. Prof. Didem TEZSÜRÜCÜ COŞANSU						

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Vahap TECİM, Ed., Yöneylem Araştırması, Lisans Yayıncılık, 2011.

Week	Weekly Detailed Course Contents	
1	Theoretical	Problem-solving process
2	Theoretical	Decision-Making Problem
3	Theoretical	Numerical solutions of differential equations
4	Theoretical	Numerical derivative
5	Theoretical	Transportation Problems
6	Theoretical	Transportation Problems
7	Theoretical	Assignment Problems
8	Theoretical	Assignment Problems
9	Intermediate Exam	Midterms
10	Intermediate Exam	Midterms
11	Theoretical	Numerical solutions of partial differential equations
12	Theoretical	Duality
13	Theoretical	Duality
14	Theoretical	Integer Programming
15	Theoretical	Integer Programming
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	16	0	3	48
Assignment	1	0	4	4
Reading	8	0	7	56
Individual Work	20	0	2	40
Midterm Examination	1	0	1	1
Final Examination	1	0	1	1
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to Recognize operations research techniques and their application.
2	To be able to express the problems with mathematical notions and have numerical thinking skills
3	To be able to model business problems with appropriate operations research technique.
4	To be able to solve problems with linear nature with computer programs such as Lindo and Excel.
5	To be able to interpret solutions

Programme Outcomes *(Human Resources Management)*

1	Having adequte scientific knowledge of Human Resources Management, basic business concepts and other social sciences
2	Thinking critically and analytically
3	Having knowledge of communication and information technologies
4	In-depth understanding of the research process and application of a range of research techniques into studies, researches and projects
5	In-depth understanding of usage of Human Resources Management and other social sciences theoretical and applied knowledge together.
6	Ability to interpret basic Business concepts from Human Resource Management perspective
7	Ability to implement basic HRM responsibilities in institutions such as HR Planning and staffing, labor relations, occupational healthy and safety, training planning, performance and rewards management, career planning, employment and interview techniques and legal HR issues
8	Implementing quality process approach into HRM process by considering institutional development, internal and external customer satisfaction; in case of need, having sense of responsibility making contribution for problem solving and continuous development and process excellence ability by problem identification, goal setting, reorganisation and change management skills
9	Management of resources and assets by considering budgetary, financial and legal issues; management of projects/operations with the ability of planning, implementation, and auditing; Having skills on management of self and other people
10	Enriching result oriented working approach with continous learning approach
11	Strong oral and written communication skills and ability to present ideas and information effectively
12	Monitor and communicate with colleagues in a foreign language using at least the European Language Portfolio B1 General Level
13	Ability to work with people of various cultural and educational background by valuing team work, developing emphathy and listening skills
14	Being conscious on social, academic and professional ethical values
15	Development of critical theoretical appreciation of ´how´, ´why´ and ´where´ HRM contributes to and supports employee and societal development, and implementing these approach for applied and graduate projects and working life

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

	L1	L3	L5
P1		1	
P2		4	4
P3	5		
P4		5	3
P6	5	3	4
P8		3	3
P9	5		
P10		3	4
P12			4
P14		5	
P15			2