



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Forecasting Techniques and Modeling							
Course Code		ISL439		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The purpose of the course is to introduce students with forecasting techniques and modeling approaches. The course will cover forecasting techniques, including regression, correlation, time series, indices, simulation, simulation modeling, linear programming, business applications of linear programming, dynamic programming, WinQSP and Lindo programs. In short, the course aims to enhance the proficiency of students regarding modeling and model building and their application in business.;;In short course, to increase students' knowledge of models and model building, and includes the conduct of business applications.							
Course Content		Subjects of Forecasting techniques, simulation, use of simulation domain management, linear programming, linear programming computer applications,							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Lec. Esin SAYIN							

Prerequisites & Co-requisites

ECTS Requisite	95
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Assessment Methods and Criteria

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

Recommended or Required Reading

1	Özdemir Ali, Yönetim Biliminde İleri araştırma Teknikleri, Beta Basım, İstanbul-2008.
2	Öztürk Fikri, Özbek Levent, Matematiksel Modelleme ve Simülasyon, Gazi Kitabevi, Ankara-2004.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to Forecasting Techniques
2	Theoretical	Estimation issues in the processing of the issue of regression
3	Theoretical	Correlation and correlation coefficient, the coefficient of determination explained
4	Theoretical	Processing of time series subject
5	Theoretical	Disclosure index and the index species
6	Theoretical	Disclosure index and the index species
7	Theoretical	Business applications of simulation
8	Intermediate Exam	Midterm Exams
9	Theoretical	Business applications of simulation
10	Theoretical	Excell simulation program, implementation
11	Theoretical	Linear programming
12	Theoretical	Business applications of linear programming
13	Theoretical	Dynamic programming
14	Theoretical	Log in to WinQSB
15	Theoretical	WinQSB application
16	Final Exam	Final Exams
17	Theoretical	Final Exams

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Midterm Examination	1	25	1	26



Final Examination	1	28	1	29
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To be able to know the topic of simulation
2	To be able to have enough experience about the business practices of the simulation
3	To be able to analyze Linear programming model building and related management issues
4	Purifies the equation from various negative effects by making appropriate transformations in the equation
5	Make a projection using the estimation equation and make decisions

Programme Outcomes (International Trade and Finance)

1	To become individuals having high intellectual capacity, improved social skills, positive thinking, the ability to adapt to different environments and institutions
2	To have technical equipment, flexible thinking and action ability and multiple language skills to be capable of working in international platforms
3	To be able to utilize the basic knowledge they obtained with an interdisciplinary approach to business, economics, etc. in creating expertise in the fields of International Trade and Finance in accordance with the requirements of the globalized business world
4	To develop suggested solutions and recommendations by informing the people and institutions predicting regional, national and international problems in the fields of international trade and finance with a proactive approach
5	To possess the ability of analytical thinking and the ability to synthesize with quantitative proficiency as required in the program
6	To have the characteristics to inquire and investigate the knowledge and skills acquired during the education process in relation to the requirements of existing market conditions
7	To identify and analyze the validity of theories related to the international trade and finance and their relationships regarding current conditions
8	To possess the knowledge of a second foreign language to the extent of their individual abilities, besides the competency in the English language to be able to communicate effectively
9	To have the qualifications of managing and being managed to solve existing and potential problems encountered in practice
10	To be able to organize activities that will contribute to the personal and professional development of the employees in the department where he/she holds an executive position

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	2	3	4	3	4
P2	2	4	3	3	4
P3	3	5	3	5	4
P4	3	5	4	4	4
P5	4	4	4	4	5
P6	5	3	3	4	5
P7	5	4	3	4	4
P8	4	4	3	3	4
P9	2	4	5	4	4
P10	3	5	3	4	4

