



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Statistical Experimental Design							
Course Code		İŞLE518		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 prepares students and present their applications to increase the knowledge of statistical experimental design includes issues.							
Course Content		Issues related to the processing of Statistical Experimental Design.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Şenoğlu Birdal, Acıtaş Şükrü, İstatistiksel Deney Tasarımı, Nobel Yayın, Ankara-2010.
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Week	Weekly Detailed Course Contents	
1	Theoretical	Design of full factorial experiments
2	Theoretical	Design of fractional factorial experiments
3	Theoretical	Taguchi method experiment design
4	Theoretical	System design, Parameter design
5	Theoretical	Tolerance design
6	Theoretical	Introduction to analysis of variance
7	Theoretical	Midterm Exams
8	Theoretical	Midterm Exams
9	Theoretical	Completion of analysis of variance
10	Theoretical	Introduction to covariance analysis
11	Theoretical	Completion of covariance analysis
12	Theoretical	Introduction to linear models
13	Theoretical	Completion of linear models
14	Theoretical	Introduction to nonlinear models
15	Theoretical	Completion of non-linear models

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	Statistics in the experimental design
2	Data model building
3	Models to make predictions using
4	To have the discussion and evaluation



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 methods)
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 internationalization

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	2	4	4	3
P2	5	3	3	3	5
P3	4	5	5	5	3
P4	2	4	2	2	4
P5	3	3	3	3	5

