

#### AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Advanced Statistics								
Course Code		FEK513		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit	5	Workload	125 <i>(Hours)</i>	Theory	'	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to enable the students to decide on the proper statistical method for the problem and the data and to apply the selected method for the data.								
Course Content		The course co method for the	vers parameti data.	ric and r	nonpa	arametric s	tatistical tests,	choosing and	d applying the pro	per
Work Placement		N/A								
Planned Learning Activities		and Teaching	Methods	Explan	ation	(Presentat	ion), Demonst	tration, Proble	m Solving	
Name of Lecturer(s)		Lec. Mesut ÇA	AKIR							

#### **Assessment Methods and Criteria**

Midterm Examination 1	Percentage (%)	
	40	
Final Examination	60	

## **Recommended or Required Reading**

1	Uygulamalı İstatistik, Özer Serper, Bursa 2010, 6. Basım
2	Principles of Applied Statistics, D. R. Cox ve Christl A. Donnelly, University of Oxford, 2011,
3	SPSS Uygulamalı Parametrik Olmayan Yöntemler Çoklu Karşılaştırmalar – Hipotez Testleri – İlişki Katsayıları Hamza Gamgam, Bülent Altunkaynak, Ekim 2012, 4. Baskı, Seçkin Yayınevi.

Week	Weekly Detailed Course Contents						
1	Theoretical	Explaining basic concepts					
2	Theoretical	Measurement levels, parameter, statistics, random variables					
3	Theoretical	Sampling distributions, confidence intervals					
4	Theoretical	Sampling distributions, confidence intervals					
5	Theoretical	Types of errors and hypothesis tests					
6	Theoretical	Types of errors and hypothesis tests					
7	Theoretical	Types of errors and hypothesis tests					
8	Intermediate Exam	Midterm					
9	Theoretical	Tests for variance homogeneity and its applications					
10	Theoretical	Tests for one sample					
11	Theoretical	Tests for two independent samples					
12	Theoretical	Tests for two dependent samples					
13	Theoretical	Tests for dependence and homogeneity					
14	Theoretical	Tests for more than two independent samples					
15	Theoretical	Tests for more than two independent samples					
16	Final Exam	Final Exam					

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload		
Lecture - Theory	14	4	3	98		
Midterm Examination	1	10	1	11		
Final Examination	1	14	2	16		
	125					
	5					
*25 hour workload is accepted as 1 ECTS						



Lean	ing Outcomes						
1	Developing and deepening the knowledge of financial econometrics to an expert level, building on the competencies of the undergraduate education.						
2	Comprehending the interaction between related disciplin	es ai	nd financialal econometrics				
3	Modelling problems using the knowledge of Mathematics	, Sta	atistics, and Econometrics				
4	Creating new knowledge by combining the knowledge of disciplines and also be able to solve problems which req	fina uires	ncial econometrics with the knowledge coming from other s expert knowledge by applying scientific methods				
5	The ability to think analytically						

### Programme Outcomes (Econometrics Master)

Learning Outcome

1	Understanding the concept of econometric
2	Ability to estimate econometric models
3	Test to the estimated reliability of the econometric model
4	Learning time series analysis
5	Recognition of financial assets and analysis that estimates the decisions of economic units
6	Be able to use econometric methods developed specifically for analysis of financial data
7	To be able to use computer programs needed in the field financial economics as well as information and communication technologies in advanced levels
8	Provision of the information that will be base for the econometric applications on money theories, theories of international trade and finance
9	Considering a scientific research, to be able to make a profound literature research, analysis, estimations and reporting findings in a scientific work

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

