

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Statistical Data Analysis With Program Application								
Course Code	UTB518		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit 5	Workload	122 (Hours)	Theory	3	Practice	0	Laboratory	0	
Objectives of the Course The aim of the department is to provide bases of probability, statistics and stochastic models and to use computers while teaching students these basic knowledge					d to use				
Course Content  Students will learn and use various technologies such as computer, internet, multimedia, television, video, projector machines through the courses that give priority to the use of developing information technologies in school and the development of various materials necessary for teaching				ion, ation					
Work Placement	N/A								
Planned Learning Activities and Teaching Methods			Explanation	(Presenta	tion)				
Name of Lecturer(s)									

Assessment Methods and Criteria					
Method	Quantity	Percentage (%)			
Midterm Examination	1	40			
Final Examination	1	60			

## **Recommended or Required Reading**

1 "Kuramsal İstatistik", Özge Akkuş, Seçkin Yayıncılık, 2017

Week	Weekly Detailed Course Contents				
1	Theoretical	Overview of statistical package program			
2	Theoretical	Overview of statistical package program			
3	Theoretical	Descriptive statistics: Organizing and displaying data; Frequency distributions; Relative frequency distributions; Cumulative frequency distributions;			
4	Theoretical	Histograms and graphs; Measures of central tendency; Mean, median, and mode, Interpretations;			
5	Theoretical	Measures of variation, Range, Variance and standard deviation, Quarters and percentiles, Interpretations			
6	Theoretical	Types of Distributions: Symmetric, Asymmetric (positive and negative skew),			
7	Theoretical	Random Variables and Probability Distributions: Discrete Random Variables, Probability distribution of a discrete random variable, Mean (expected value) and standard deviation of a discrete random variable			
8	Intermediate Exam	Midterm			
9	Final Exam	Midterm			
10	Theoretical	Confidence Intervals: Large sample, Small sample from a normal population, the Difference between Two Population Means, Independent samples, samples for Dependent variables			
11	Theoretical	For a population mean: Large sample (z-test), Small sample from a normal population (t-test), Use of statistical software package to compute z- or t- score; For the difference of two population means			
12	Theoretical	Independent samples (z- or t-test), Dependent samples (z- or t-test), Use of statistical software package to compute z- or t-			
13	Theoretical	Chi-Square tests of Hypotheses: Fitting Test; Test of Independence; Test of Homogeneity			
14	Final Exam	Final			
15	Final Exam	Final			

Workload Calculation					
Activity	Quantity	Preparation	Duration	Total Workload	
Lecture - Theory	3	10	15	75	
Term Project	1	10	1	11	



Midterm Examination	1		35	1	36
Total Workload (Hours)				122	
[Total Workload (Hours) / 25*] = <b>ECTS</b>			5		
*25 hour workload is accepted as 1 ECTS					

### **Learning Outcomes**

- 1 It should be able to decide the appropriate methods to be used in the statistical analysis of the data.
- 2 It should be able to design experimental design of statistical problems, to model mathematically, to be able to solve and to interpret the results.
- 3 be able to use the ready-made software in the field of statistics and statistics.
- 4 Statistical software package use z or t-score to calculate.
- 5 Apply Chi-Square Hypothesis tests.

#### Programme Outcomes (International Trade Master's Without Thesis)

- To be able to comprehend and solve economic issues using other social sciences and the basic principles of economic science
- To be able to access information, evaluate, interpret, and implement in the processes of the scientific research processes related to International economy.
- To be able to predict the effects of economic and political developments on the Turkish financial markets and foreign rade sector, to be able to view, comprehend and interpret national and international financiall markets, to be able to apply the innovative methods.
- To be able to communicate with all private firms showing activity in the countryside at the required level of behavior science, to detect problems, and to be able to conduct joint project.
- To be able to lead multi-disciplinary studies in foreign trade, to be able to enhance solutions in complex situations and to be able to take responsibility.
- To be able to raise awareness about the new and developing practices of the job, to be able to review and learn these when needed.
- 7 To be able to use theoretical and practical information in International economics and foreign trade
- <sup>8</sup> To be able to design innovative solutions integrating the original ideas and methods in administrative sciences and the international economy with the system, part or process designs.
- 9 To be able to articulate the idea, and the findings about the research topic verbal and written in an effective way.

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

	L5
P3	5
P4	5
P5	5
P6	5

