AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Nonparametric Statistics							
Course Code		MTK522		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		This course introduces various and important test of nonparametic statictical							
Course Content		Binomial test,khi-square test for one example, Kolmogorov-Smirnov test for one example, McNemar test for meaningfulness in variations, Kolmogorov-Smirnov test for pair example, Test of randomness, correlation coefficient of degree.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70

Recommended or Required Reading	
1	Siegel S. Nonparametric Statistics for the Behavioral Sciences McGraw-Hill Kagakuska Ltd. Tokyo 1956.
2	Gamgam H. Parametrik Olmayan İstatistik Teknikleri (Methods of Nonparametric Statistics) Gazi Üniv. Yayınları No: 140 Ankara 1989.

Week	**Weekly Detailed Course Contents**	
1	Theoretical	Binomial test,khi-square test for one example
2	Theoretical	Kolmogorov-Smirnov test for one example
3	Theoretical	McNemar test for meaningfulness in variations
4	Theoretical	Signal test, Wilcoxon test for degree
5	Theoretical	Fisher complete probability test
6	Theoretical	Mann-Whitney U test
7	Theoretical	Kolmogorov-Smirnov test for pair example
8	Theoretical	Moses Overreactions Test
9	Theoretical	Randomness Test, Midterm Exam
10	Theoretical	Randomness Test
11	Theoretical	Cochran Q test
12	Theoretical	Analysis of variance whit degree . Friedman and Kruskal-Wall test
13	Theoretical	Spearman correlation coefficient of degree
14	Theoretical	Kendall correlation coefficient of degree.
15	Final Exam	FINAL EXAM

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Individual Work	14	0	4	56
Midterm Examination	1	42	3	45
Final Examination	1	54	3	57
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to design Test of hypothesis

2	To be able to define some mathematical concepts which are essential in his/her field
3	To be able to gain the skill of interpreting some interrelations among these concepts
4	To be able to use mathematical concepts in solving certain types of problems
5	To be able to develop analytical skills and apply to problems

Programme Outcomes *(Mathematics Master)*	
1	To be able to have an adequate theoretical and practical domain knowledge.
2	To be able to comprehend the interdisciplinary interaction associated with Mathematics.
3	To be able to use theoretical and practical domain knowledge gained in the field of Mathematics.
4	To be able to interpret knowledge from different disciplines integrating knowledge in the field of mathematics and produce new information.
5	To be able to define, analyse, model and to solve the problems by scientific methods in Mathematics.
6	To be able to conduct a math related specialistic study independently.
7	To be able to develop new strategic approaches to solve problems occurred in unforeseen and complex math-related applications by taking responsibility.
8	To be able to lead in situations that require solving problems related to the mathematics.
9	To be able to criticize his/her knowledge and skills acquired in the field mathematics.
10	To be able to transfer his/her ideas and suggestions for solutions to problems by supporting quantitative or qualitative data verbally and in writing.
11	To be able to communicate both orally and written in a foreign language.
12	To be able to use computer hardware and information technologies with software required by Mathematics.
13	To be able to contribute to the solution of the social, scientific, cultural and ethical problems related to the Mathematics, and being able to support the development of social, scientific, cultural and ethical values.
14	To be able to develop mathematics-related strategies, policies and operational plans, and to evaluate the results obtained within the framework of quality processes.
15	To be able to use his/her knowledge in the field of mathematics and practical problem-solving skills in interdisciplinary studies.

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	3	3	4	4
P2	3	3	3	3	4
P3	3	3	3	3	4
P4	3	3	3	4	4
P12	3	3	3	4	4
P15	4		4	4	4