NONPARAMETRIC STATISTICS

1	Course Title:	NONPARAMETRIC STATISTICS
2	Course Code:	EKO3207
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	5
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	No
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Nuran Bayram
15	Course Lecturers:	Prof. Dr. Sevda Gürsakal
16	Contact information of the Course Coordinator:	E-posta: nuranb@uludag.edu.tr Telefon: 224 29 41126 Adres: Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi, Ekonometri Bölümü, Görükle, Bursa
17	Website:	
18	Objective of the Course:	Show the non-parametric statistical techniques. Specify how and where they applied a scientific study.
19	Contribution of the Course to Professional Development:	It has a contribution towards forming a basis for the development of students' professional skills related to nonparametric statistics.
20	Learning Outcomes:	

	1	Discuss nonparametric statistical techniques.
	2	Explain basic properties of nonparametric statistical Techniques.
	3	Analyze nonparametric statistical techniques.
	4	Learn nonparametric statistical techniques for one sample.
	5	Learn nonparametric statistical techniques for dependent two samples.
	6	Learn nonparametric statistical techniques for independent two samples.
	7	Learn nonparametric statistical techniques for dependent K samples.
	8	Learn nonparametric statistical techniques for independent K samples.
	9	
	10	

21	Course Content:	

Course Content:		
Week	Theoretical	Practice
1	Population and Sampling, Data Measurement: Nominal scale, Ordinal scale, equal interval scale, proportional scale	

Week	Content
2	Estimation, Hypothesis Tests: Determination of the null hypothesis, selecting the appropriate statistical test, determination of sample number, identification of Refuse Zone
3	Assumptions and characteristics of parametric and nonparametric statistics Parametric Tests, Nonparametric tests
4	Chi square for one sample Kolmogorov Smirnov test for one sample and aplications by using SPSS
5	Sign test for one sample, Wilcoxon sign rank test and aplications by using SPSS
6	Nonparametric Runs test for one sample and Aplications by Using SPSS
7	Nonparametric statistics Tests for dependent two sample: Sign Test, Wilcoxon sign rank test
8	Comparison of Mc Nemar test, Sign test, Wilcoxon signed rank test
9	Nonparametric statistics tests for two independent sample: Chi square test, Kolmogorov Smirnow test and application by using SPSS
11	Nonparametric statistics Tests for k Cochran Q test, Friedman Aplication by Using SPSS
12	Nonparametric statistics Tests for k independent sample using SPSS
13	Spearman's rank correlation Coefficient and test, Kendall's rank correlation coefficients
14	Kendall's rank correlation coefficient and test, Kendall's goodness of fit coeffient and test.

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00
Homeworks	1	20.00	20.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	20.00	20.00
Others	1	20.00	20.00
Final Exams	1	25.00	25.00
Total Work Load			175.00
Total work load/ 30 hr			5.17
ECTS Credit of the Course			5.00

22	Textbooks, References and/or Other Materials:	1-Uygulamalı Parametrik Olmayan İstatistik Testleri; Mustafa Aytaç 2-Parametrik Olmayan İstatistiksel Teknikler; Hamza Gamgam 3-SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri;Şeref Kalaycı 4-Applied Nonparametric statistical Methods ; Peter Sprent and Nigel C. smeeton
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00

Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation are made with multiple choice test questions and written questions.

24	**ECTS / WORK LOAD TABLE**

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	3	3	3	2	3	4	2	3	3	4	3	3	4	4	0	0
ÖK2	3	2	3	4	2	3	2	2	3	3	4	4	4	4	0	0
ÖK3	3	2	3	2	2	3	3	2	3	2	2	3	4	4	0	0
ÖK4	3	2	2	2	3	2	3	2	3	3	2	3	4	4	0	0
ÖK5	2	2	3	2	3	2	3	3	2	3	3	2	4	4	0	0
ÖK6	2	3	3	2	2	2	3	3	2	2	3	3	4	3	0	0
ÖK7	2	3	2	3	2	3	2	3	3	2	3	2	4	4	0	0
ÖK8	3	2	3	2	3	2	2	3	2	3	2	3	4	3	0	0

LO: Learning Objectives   PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**