

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Industrial Engineering (English)

Course Information

STATISTICAL METHODS IN SPSS					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
INE415	Fall	3	0	3	4

Prerequisites and co-requisites	NONE
Language of instruction	English
Type	Elective
Level of Course	Bachelor's
Lecturer	Prof. Dr. Adnan MAZMANOĞLU
Mode of Delivery	Face to Face
Suggested Subject	NONE
Professional practise (internship)	None
Objectives of the Course	Analyzing the quantitative data in research at the sufficient level
Contents of the Course	Research and data analysis, hypothesis tests, simple/ bivariate and partial correlation, parametric tests, independent samples t-tests, ANOVA, paired samples tests, one/two way ANOVA of mixed measures, simple linear regression, ANCOVA, factor analysis, multivariate ANOVA, MANOVA, chi-square test, Mann Whitney U test, Kruskal Wallis H test, Wilcoxon signed rank test, reliability analysis

Learning Outcomes of Course

#	Learning Outcomes
1	Upon completion of this course students will explain properties of hypothetical tests.
2	Upon completion of this course students will form a data set in SPSS.
3	At the end of this course students will execute parametric and non-parametric tests in SPSS.
4	Upon completion of this course students will interpret SPSS outcomes.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Inferences Based on Single Sample. Estimation with Confidence Intervals.	Synchronous+ Asynchronous
2	Identifying the Target Parameter. Large-Sample Confidence Interval for Pop.Mean	Synchronous+ Asynchronous
3	Small-Sample Confidence Interval for Population Mean	Synchronous+ Asynchronous
4	Large-Sample Confidence Interval for a Population Proportion .	Synchronous+ Asynchronous
5	Examples of solutions for interval estimation in SPSS.	Synchronous+ Asynchronous
6	Determining the sample Size. Finding the sample size for estimating pop. Mean.	Synchronous+ Asynchronous
7	Determining the sample Size. Finding the sample size for estimating pop.	Synchronous+ Asynchronous
8	Mid-term exam	Synchronous+ Asynchronous
9	Inferences Based on two Sample. Confidence Intervals and Tests of Hyp.	
10	Comparing Two population Means: Independent Sampling for Target Parmtr.	Synchronous+ Asynchronous
11	Comparing Two population Means: Paired Difference Experiments	Synchronous+ Asynchronous
12	Comparing Two population Proportions: Independent Sampling.	Synchronous+ Asynchronous

13	Hypothesis testing in two sample applications in SPSS.	Synchronous+ Asynchronous
14	Comparing Two population Variances: Independent Sampling.	Synchronous+ Asynchronous
15	Simple Linear Regression and The Coefficient of Correlation and Model Estm.	Synchronous+ Asynchronous
16	Final Exam	Synchronous+ Asynchronous

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1			

Method of Assessment

#	Weight	Work Type	Work Title
1	30%	Mid-Term Exam	Mid-Term Exam
2	70%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Upon completion of this course students will explain properties of hypothetical tests.		
2	Upon completion of this course students will form a data set in SPSS.		
3	At the end of this course students will execute parametric and non-parametric tests in SPSS.		
4	Upon completion of this course students will interpret SPSS outcomes.		

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	1	5	5
9	Quiz	0	0	0
10	Homework	1	6	6
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	0	0	0
16	Final Exam	1	9	9
				90

