



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Applied Educational Statistics							
Course Code		EPÖ503		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	127 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		At the end of this course, the students; 1) comrehend basic statistical terminology 2) carry out analyses in accordance with types of variables							
Course Content		The course focuses on basic concepts of statistics, parametric and non-parametrics test which are used in social sciences. Those techniques are used with computer practically.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study					
Name of Lecturer(s)		Lec. Meltem ÇENGEL SCHOVILLE							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Practice	8	10
Assignment	7	10

### Recommended or Required Reading

1	Büyüköztürk, Ş. (2012). Sosyal bilimler için veri analizi el kitabı. Ankara: PegemA Yayınları.
2	Williams, F. (1992). Reasoning with Statistics. Fort Worth: harcourt Brace Javanovich College Publishers.
3	Büyüköztürk, Ş. (2013). Sosyal Bilimler için İstatistik. Ankara: PegemA Yayınları.
4	Kalaycı, Ş. (2006). SPSS uygulamalı çok değişkenli istatistik teknikleri (Vol. 2). Asil Yayın Dağıtım.
5	Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2010). Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları. Pegem Akademi.
6	Alpar, R. (2006). Spor bilimlerinde uygulamalı istatistik. Nobel.
7	Tabachnick, B. G., Fidell, L. S. (2001). Using multivariate statistics. Pearson Education
8	Whittaker, J. (2009). Graphical models in applied multivariate statistics. Wiley Publishing.
9	Grimm, L. G., & Yarnold, P. R. (1995). Reading and understanding multivariate statistics. American Psychological Association.
10	Alpar, R. (2003). Uygulamalı çok değişkenli istatistiksel yöntemlere giriş 1. Nobel Yayın Dağıtım.
11	Alpar, R. (2010). Spor, sağlık ve eğitim bilimlerinden örneklerle uygulamalı istatistik ve geçerlik-güvenirlik. Detay Yayıncılık.
12	Büyüköztürk, Ş. (2001). Deneysel desenler: Öntest sontest kontrol gruplu desen ve veri analizi. Pegem Yayınları, Ankara.

Week	Weekly Detailed Course Contents	
1	Theoretical	Reconstructing the syllabus
2	Theoretical	Central tendency measurement, normality, curtosis, and skewness.
	Practice	Studying the concepts "central tendency measurement, normality, curtosis, and skewness" on computer package programs
	Preparation Work	Reading about "central tendency measurement, normality, curtosis, and skewness"
3	Theoretical	Developing an achievement test
	Preparation Work	Reading about achievement tests
4	Theoretical	Developing a test
	Practice	Developing an achievement test about any subject
5	Theoretical	Developing a test
	Practice	Developing an achievement test about any subject
6	Theoretical	Scales and scale development
	Preparation Work	Reading about "scale and scale development"
8	Theoretical	Scales and scale development
	Practice	Study on "scale and scale development"
9	Intermediate Exam	Mid term exam



10	Theoretical	T-test
	Practice	Study on T-test on computer package programs
	Preparation Work	Reading about T-test
11	Practice	Study on ANOVA on computer package programs
	Preparation Work	Reading about ANOVA
12	Theoretical	Regression analysis
	Preparation Work	Reading about regression analysis
13	Theoretical	Regression analysis
	Practice	Study on regression analysis on computer package programs
14	Theoretical	Non-parametric testler
	Preparation Work	Reading about non-parametric tests
15	Theoretical	Non-parametric tests
	Practice	Study on non-parametric tests on computer package programs
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	3	3	1	12
Reading	3	0	5	15
Midterm Examination	1	15	2	17
Final Examination	1	25	2	27
Total Workload (Hours)				127
[Total Workload (Hours) / 25*] = ECTS				5

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	To be able to choose the right statistics techniques for research problems
2	To be able to use the statistic technique properly
3	To be able to use SPSS package programs
4	To be able to interpret the analysis tables
5	To be able to evaluate the statistics in different studies
6	To be enthusiastic to apply different statistics techniques on data

### Programme Outcomes (Curriculum and Instruction Master)

1	To be able to use the basic concepts in the field of Curriculum Development and Instruction correctly
2	To be able to comprehend philosophical, social, historical and psychological principles influencing curriculum
3	To be able to analyze theoretical bases of learning-teaching theories and approaches
4	To be able to evaluate any curriculum in accordance with scientific principles
5	To be able to prepare a curriculum design cooperatively in accordance with principles and criteria
6	To be able to follow contemporary implementations, and national and international academic publications
7	To be able to prioritize scientific methods and ethical principles in educational sciences while considering and implementing field specific professional issues
8	To be willing to do scientific research in the field of Curriculum and Instruction
9	To be able to appreciate curriculum development profession as a professional identity

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

	L1	L2	L3	L4	L5	L6
P1	4	4	3	4	4	5
P2	5	5	5	3	4	5
P3	3	5	5	5	4	5
P4	5	5	4	5	5	5
P5	4	4	4	5	5	5
P6	4	4	3	4	5	4



P7	4	4	3	5	4	4
P8	5	4	4	5	4	5
P9	5	4	4	5	4	5

