



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Computer Based Statistics in Educational Research							
Course Code		EYT532		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	128 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		In this course, it is aimed to make students be able to choose the appropriate statistical techniques for data, to enter data to SPSS and use the appropriate statistical techniques with SPSS.							
Course Content		Basic concepts related to statistics, organization of data, applications in statistical package programs. In this context, percentile and the creation of frequency tables, parametric and non-parametric statistical analysis are covered in this course. (chi-square, independet t-test, ANOVA, Kruskal-Wallis, Whitney-U, dependet t-test, Wilcon Z).							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

### Recommended or Required Reading

1	Büyüköztürk, Ş. (2012. )Sosyal Bilimler İçin Veri Analizi. Ankara: Pegem A Publication.
2	Büyüköztürk, Ş. (2007) Deneysel Desenler. Ankara: Pegem A A Publication.
3	Karasar, N. (2012). Bilimsel Araştırma Yöntemi. Ankara: Nobel Publication-Distribution.
4	Norusis, M.J. (2004). SPSS 12.0 Guide to Analysis. Prentice Hall.
5	Green, B., S. & Salkind, N., J. (2005). Using SPSS for Windows and Macintosh: analyzing and understanding data. New Jersey: Pearson Prentice Hall

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic concepts in statistics , description of statistics
	Preparation Work	Büyüköztürk, Ş. (2012. )Sosyal Bilimler İçin Veri Analizi. Ankara: Pegem A Publishing. (p.1-12)
2	Theoretical	Parametric and non-parametric techniques
	Preparation Work	Büyüköztürk, Ş. (2012. )Sosyal Bilimler İçin Veri Analizi. Ankara: Pegem A Publishing. (p.1-12)
3	Theoretical	Data types, Determination of statistics with respect to data types
	Preparation Work	Karasar, N. (2012). Bilimsel Araştırma Yöntemi. Ankara: Nobel Publication-Distribution. (p.131-197)
4	Theoretical	Data entry, specifications.
	Preparation Work	Karasar, N. (2012). Bilimsel Araştırma Yöntemi. Ankara: Nobel Publication-Distribution. (p.197-245).
5	Theoretical	Data analysis by SPSS. Basic applications: creating folder, introducing variables.
	Preparation Work	Karasar, N. (2012). Bilimsel Araştırma Yöntemi. Ankara: Nobel Publication-Distribution. (p.197-245).
6	Theoretical	The creation of frequency tables and graphs, descriptive statistics: mean, standard deviation, range etc.
	Preparation Work	Karasar, N. (2012). Bilimsel Araştırma Yöntemi. Ankara: Nobel Publication-Distribution. (p.197-245).
7	Theoretical	Ki-square Test by SPSS
	Preparation Work	Literature review
8	Intermediate Exam	Mid Term Exam
9	Theoretical	T-test, ANOVA by SPSS
	Preparation Work	Green, B., S. & Salkind, N., J. (2005). Using SPSS for Windows and Macintosh: analyzing and understanding data. New Jersey: Pearson Prentice Hall. (p.189-221).
10	Theoretical	Mann Withney-U, Kruskal Wallis by SPSS
	Preparation Work	Literature review
11	Theoretical	Wilcoxon-z test by SPSS



11	Preparation Work	Literature review
12	Theoretical	SPSS Applications
	Preparation Work	Green, B., S. & Salkind, N., J. (2005). Using SPSS for Windows and Macintosh: analyzing and understanding data. New Jersey: Pearson Prentice Hall.
13	Theoretical	SPSS Applications
	Preparation Work	Green, B., S. & Salkind, N., J. (2005). Using SPSS for Windows and Macintosh: analyzing and understanding data. New Jersey: Pearson Prentice Hall.
14	Theoretical	SPSS Applications
	Preparation Work	Green, B., S. & Salkind, N., J. (2005). Using SPSS for Windows and Macintosh: analyzing and understanding data. New Jersey: Pearson Prentice Hall.
15	Theoretical	General Evaluation
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	5	3	112
Midterm Examination	1	5	3	8
Final Examination	1	5	3	8
Total Workload (Hours)				128
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Uses the SPSS program
2	Applies the statistical procedures
3	Selects the data with appropriate statistical program
4	Interpret the table of analysis
5	To be able to analyze the data and to be able to interpret the analyses

### Programme Outcomes (Educational Administration Supervision Planning And Economics Master)

1	To be able to deepen the collected knowledge related to education toward basic theories and applications of EASPE and evaluate the relationships between the theories and applications related to educational administration and supervision.
2	To be able to comprehend the relationships between EASPE and psychology, sociology, philosophy, management, economy, political sciences and other related disciplines and to carry out interdisciplinary studies by using gained knowledge and abilities related to EASPE.
3	To be able to apply the knowledge obtained to different level educational organizations in order to be developed and be managed effectively.
4	To be able to identify the problems of educational administration and supervision by using the knowledge obtained in EASPE and to develop new point of views by using the knowledge obtained from related disciplines
5	To be able to propose solutions to the problems of educational system by using qualitative and quantitative research methods and by mounting the problems of EASPE in the problem-solving framework.
6	To be able to develop necessary skills of using statistical softwares in order to carry out a scientific research and to use knowledge and communication technologies necessary for sharing knowledge and data.
7	To be able to develop solution models toward the problems of EASPE by using related theories and approaches and to apply these solution models to the total system.
8	To be able to gain the knowledge necessary for carrying out independent studies in EASPE and to apply teamwork skills in order to reach effective results in interdisciplinary studies
9	To be able to evaluate assumptions, opinions and theories related to the field of EASPE by sceptical, logical, analitical, independent and cretical point of view.
10	To be able to internalize the principles of professional development and lifelong learning which are considered necessary for the field of EASPE.
11	To be able to transfer the recent developments in the field of EASPE and his/her quality scientific studies to the people, institutions and organizations in and out of the field by written, non-written and visual systematically
12	To be able to follow the recent international studies in the field ,to participate in international social and scientific teamworks and to have language skills and competence for sharing and demonstrating his / her studies.
13	To be able to interpret the strategies, politics and plans developed for educational system in the way of theories and principles of educational administration and supervision and to evaluate the obtained results in the framework of national and international indicators.
14	To be able to carry out research processes within the framework of EASPE by applying the social, scientific and ethical values.



15	To be able to develop new point of views by analyzing the reflections of international educational policies on national educational policies.
16	To To be able to develop leadership skills in order to move the human resources toward organizational goals and the visions of educational institutions.
17	To be able to evaluate the social,cultural and scientific educational developments in accordance with national policies and sources.
18	To be able to apply the strategies and processes designed in relation with change management at schools by analyzing the nature of internal and external forces leading towards change at schools within the framework of school and environment relations.

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

	L1	L2	L3	L4
P1	3	3	3	4
P2	1	2	2	2
P4	2	2	2	3
P5	5	5	5	5
P6	5	5	5	5
P8	3	3	3	3
P14	1	1	1	1
P18	1	1	1	1

