



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Statistics							
Course Code		FBÖ307		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		This course aims to teach basic statistics and probability concepts.							
Course Content		Introduction to statistics and basic concepts of statistics, descriptive statistics (measures of central tendency and distribution), estimation of universe parameters (standart error and reliability intervals), concept of correlations and alternative correlations methods, testing of hypothesis, decision making, difference tests, test of chi-square, the process of scale development, standardization and adaptation, data analyzing with package programs and alternative programs.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık.
2	Baykul, Y. (2010). Eğitimde ve Psikolojide Ölçme: Klasik Test Teorisi ve Uygulaması. Ankara: Pegem Akademi.
3	Turgut, M.F. & Baykul, Y. (2010). Eğitimde Ölçme ve Değerlendirme. Ankara: Pegem Akademi.
4	Büyüköztürk, Ş. (2011). Sosyal Bilimler için Veri Analizi El Kitabı. Ankara: Pegem Akademi.
5	Köklü, N. & Büyüköztürk, Ş. (2000). Sosyal Bilimler için İstatistiğe Giriş. Ankara: Pegem Akademi.
6	Spiegel, M.R. & Stephens, L.J. (Çev.Ed. Esin, A. & Çelebioğlu, S.). (1999). İstatistik. Ankara: Nobel Yayıncılık.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to statistics and basic concepts of statistics
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:31-75)
2	Theoretical	Descriptive statistics (measures of central tendency and distribution)
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:75-126)
3	Theoretical	Estimation of universe parameters (standart error and reliability intervals)
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:256-269)
4	Theoretical	Estimation of universe parameters (standart error and reliability intervals)
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:269-290)
5	Theoretical	Concept of correlations and alternative correlations methods
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:140-182)
6	Theoretical	Testing of hypothesis, decision making, difference tests
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:316-345)
7	Theoretical	Testing of hypothesis, decision making, difference tests
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:345-373)
8	Theoretical	Test of chi-square
	Preparation Work	Baykul, Y. (1999). İstatistik Metodlar ve Uygulamalar. Ankara: Anı Yayıncılık. (pp:373-394)
9	Intermediate Exam	Midterm Exam
10	Theoretical	The process of scale development, standardization and adaptation
	Preparation Work	Baykul, Y. (2010). Eğitimde ve Psikolojide Ölçme: Klasik Test Teorisi ve Uygulaması. Ankara: Pegem Akademi. (pp:313-336)
11	Theoretical	The process of scale development, standardization and adaptation
	Preparation Work	Baykul, Y. (2010). Eğitimde ve Psikolojide Ölçme: Klasik Test Teorisi ve Uygulaması. Ankara: Pegem Akademi. (pp:336-362)
12	Theoretical	The process of scale development, standardization and adaptation



12	Preparation Work	Baykul, Y. (2010). Eğitimde ve Psikolojide Ölçme: Klasik Test Teorisi ve Uygulaması. Ankara: Pegem Akademi. (pp:362-392)
13	Theoretical	Data analyzing with package programs and alternative programs
	Preparation Work	Büyükoztürk, Ş. (2011). Sosyal Bilimler için Veri Analizi El Kitabı. Ankara: Pegem Akademi. (pp:31-79)
14	Theoretical	Data analyzing with package programs and alternative programs
	Preparation Work	Büyükoztürk, Ş. (2011). Sosyal Bilimler için Veri Analizi El Kitabı. Ankara: Pegem Akademi. (pp:79-123)
15	Theoretical	Data analyzing with package programs and alternative programs
	Preparation Work	Büyükoztürk, Ş. (2011). Sosyal Bilimler için Veri Analizi El Kitabı. Ankara: Pegem Akademi. (ss:123-182)
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Reading	14	0	2	28
Midterm Examination	1	8	1	9
Final Examination	1	8	2	10
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	The learner is expected to be able to making basic statistical calculations on a data set with using descriptive statistics that measures of central tendency and distribution.
2	The learner is expected to be able to determinate the relation between two data sets with using different correlation methods.
3	The learner is expected to be able to estimate the universe parameters with using statistics that collected from sample.
4	The learner is expected to be able to make desicions about a data set with using different tests of hypothesis.
5	The learner is expected to be able to use various software packages in analysing data.

Programme Outcomes (Science Teacher Education)

1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophy they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter.
7	To be able to become individuals faithful to the Principles and Revolutions of Ataturk, be modern democratic, secular, protecting and deveoping one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture.
9	To be able to become individuals believing in lifelong learning.
10	To be able to gain the vision of being individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solutions of these problems.

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	5	4	4	4	4
P2	4	3	3	3	4
P3	3		4	4	4
P4	4	3	3	3	
P9	3	2			

