



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Biostatistic							
Course Code		HDK526		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	4	Workload	101 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Students learn biostatistical methods they can use in their research and theses practically.							
Course Content		In this course, descriptive statistics, sampling methods, the population parameter measures, simple and composite calculation methods, growth rate calculations, time series analysis, tables and graphs, theoretical distributions, correlation and regression analysis, hypothesis testing and applications are examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Problem Solving					
Name of Lecturer(s)		Prof. Kadir KIZILKAYA							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	1. Akgül A. Tıbbi Araştırmalarda İstatistiksel Analiz Yöntemleri.
2	2. Aksakaoğlu G. (2001). Sağlıkta Araştırma Teknikleri ve Analiz Yöntemleri Dokuz Eylül Üniversitesi Rektörlük Matbaası, İzmir.
3	3. Arıkan R. (2000). Araştırma Teknikleri ve Rapor Yazma. 3. Basım, Gazi Kitabevi, Ankara.
4	4. Arseven A. (2001). Alan Araştırma Yöntemi. İlkeler, Teknikler, Örnekler. 2. Baskı, Gündüz Eğitim Ve Yayıncılık. Ankara.
5	5. Bayram N. Sosyal Bilimlerde SPSS Veri Analizi. 2. Baskı, Ezgi Kitabevi. Bursa.
6	6. Büyüköztürk Ş. (2005). Sosyal Bilimler İçin Veri Analizi El Kitabı, İstatistik, Araştırma Deseni, SPSS Uygulamaları ve Yorum, Gözden Geçirilmiş 5. Baskı, Pegem Yayınları
7	7. Çelik, M. Y. (2011). Nasıl? Biyoistatistik Bilimsel Araştırma SPSS. Rotatıp Yayınları.
8	8. Erkuş A. (2003) Psikometri Üzerine Yazılar. Ölçme ve Psikometrinin Tarihsel Kökenleri Güvenilirlik Geçerlilik Madde Analizi Tutumlar: Bileşenleri ve Ölçülmesi. Türk Psikologlar Derneği Yayınları No:24, Ankara.
9	9. Hayran M., Hayran M. (2011). Sağlık Araştırmaları İçin Temel İstatistik. Omega Araştırma Organizasyon Eğitim Danışmanlık Ltd. Şti. Ankara.
10	10. Hayran O. (2012). Sağlık Bilimlerinde Araştırma ve İstatistiksel Yöntemler. 1. Baskı, Rotatıp Yayınları.
11	11. İter, C. Ofis 2007, İstanbul: Pusula, ISBN: 978-9944-711-18
12	12. İnci E., Aksayan S., Bahar Z., Bayık A., Emiroğlu O., Erefe İ., Görak G., Karataş N., Kocaman G., Kubilay G., Seviğ Ü. (2002). Hemşirelikte Araştırma İlke ve Süreç Yöntemler. İstanbul.
13	13. Karasar, N. (1995) Bilimsel Araştırma Yöntemi, 7. Basım
14	14. Karasar N. (1995). Araştırmalarda Rapor Hazırlama. 8. Basım Alkim Yayınları, Ankara.
15	15. Özçelik A.D., (1981). Araştırma Teknikleri, ÖSYM Eğitim Yayını.
16	16. Özdamar K. (2004). Paket Programlar İle İstatistiksel Veri Analizi (Çok Değişkenli Analizler) 2. Yenilenmiş 5. Baskı. Kaan Kitabevi, Eskişehir.
17	17. Özdamar K. Spss İle Biyoistatistik, Kaan Yayınevi, Eskişehir.
18	18. Polit D. F. (1996). Data Analysis & Statistics For Nursing Research. Appleton & Lange, New York.
19	19. Seamen, H.C.C. (1987). Research Methods Principles, Practice And Theory For Nursing, California.
20	20. Sencer, M. ve Sencer, Y. (1978). Toplumsal Araştırmalarda Yöntem Bilim, Türkiye ve Ortadoğu Amme İdaresi Enstitüsü. Yayınları, No: 172, Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and usage areas of statistics, the importance of biostatistics for health staff, the concept of measure, measurement error
2	Theoretical	The concept of variable and variable types, basic knowledge necessary for the analysis of numerical data
3	Theoretical	Classification and tabulation of the data
4	Theoretical	Making tables and drawing the graphics



5	Theoretical	Probability
6	Theoretical	Sampling methods and sample size determination
8	Theoretical	Measures of dispersion
9	Intermediate Exam	Midterm exam
10	Theoretical	Stating the hypothesis, tests of hypotheses
11	Theoretical	Parametric and non-parametric tests in comparison of two groups
12	Theoretical	Calculation methods and usage areas of simple and composite index, growth rate calculations, time series analyses
13	Theoretical	Calculation methods and usage areas of simple and composite index, growth rate calculations, time series analyses
14	Theoretical	Correlation and regression analyses
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	2	2	52
Reading	13	1	0	13
Midterm Examination	1	14	2	16
Final Examination	1	18	2	20
Total Workload (Hours)				101
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to comprehend the relationship between statistic – biostatistics.
2	To be able to comprehend basic statistical concepts.
3	To be able to distinguish the differences between measuring levels.
4	To be able to distinguish the differences between types of variables.
5	To be able to comprehend basic rules of probability.
6	To be able to create tables and to draw graphs.
7	To be able to calculate the measures of central tendency and dispersion.
8	To be able to calculate the sample size.
9	To be able to comprehend the sampling methods.
10	To be able to write statistical hypothesis.
11	To be able to do parametric tests (t test, ANOVA, correlation and regression, etc.).
12	To be able to do non-parametric tests (Mann Whitney U, Kruskal-Wallis ANOVA, Chi-square, etc.).
13	To be able to measure and interpret the relation between two variables.
14	To be able to measure and interpret the relationship between the two variables

Programme Outcomes (Obstetrics and Gynecology Nursing Master)

1	Basing on the nursing degree level qualifications, to be able to comprehend the latest theoretical and applied information at the level of expertise in the field of Gynecology and Obstetrics Nursing, and can improve, deepen and use them.
2	to be able to bring solutions to issues requiring expertise related to Birth, Women's Health and Diseases Nursing, solve problems, evaluate gathered results and if necessary apply them.
3	to be able to combine information in her/his field with those from different fields to create new knowledge, interpret and synthesize and bring solutions.
4	to be able to evaluate information related to her/his field critically and direct the learning.
5	to be able to discuss and share field-information, current developments and her/his own actual works with groups in the same field or in other fields in a systematic manner.
6	to be able to follow evidence-based practices and carry out evidence-creating research in her/his field related to professional practices.
7	to be able to execute field-related works independently and/or within a team.
8	to be able to comprehend statistics, use related software effectively, have skills for choosing the right methods, calculation and interpretation while doing research.
9	to be able to prepare report of the research she/he did or participated and publish in a valued national/international journal and present at meetings.



10	to be able to develop strategy and politics in issues related to Birth, Women Health and Disease Nursing and interpret practice plans and evaluate gathered results in a scientific and ethical framework
11	to be able to establish verbal and written communication by using a foreing language at least at the European language portfolio B2 general level.
12	to be able to comprehend the importance of ethical principles and ethical rules for the individual and sociaty and behave ethic.

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	L7	L8	L9	L10	L11	L12	L13	L14
P6	3	3	3	3	3		3	3	3	3	3	3	3	3
P7	5	5	5	5	5	5	5	5	5	5	5	5	5	5
P8	5	5	5	5	5	5	5	5	5	5	5	5	5	5
P9	5	5	5	5		5	5	5	5	5	5	5	5	5

