



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF HEALTH SCIENCES**  
**BIOSTATISTICS**  
**BIOSTATISTICS (MEDICAL)**  
**BIOSTATISTICS (MEDICAL) MASTER**  
**COURSE INFORMATION FORM**

Course Title	Statistical Methods For Medical Studies								
Course Code	BİS521		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	2	Workload	48 (Hours)	Theory	1	Practice	0	Laboratory	0
Objectives of the Course	Theoretical sub-structure of some statistical methods used in the field of health with special application to have a grasp of knowledge and skills.								
Course Content	Meta-analysis, Survival analysis, Cox regression, probit analysis, logistic regression analysis, Loglinear models.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation)								
Name of Lecturer(s)									

#### Assessment Methods and Criteria

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

#### Recommended or Required Reading

1	Fleiss, J.L. (1981). Statistical Methods for Rates and Proportions, 2nd Ed. John Wiley and Sons Series, USA.
2	Everitt, B.S. (1980). The Analysis of Contingency Tables, Chapman and Hall Ltd, UK.
3	Rothman, K.J., Greenland, S. (1998). Modern Epidemiology 2nd Ed., Lippincott Williams and Wilkins, USA.
4	Armitage, P., Berry, G., & Matthews, J. N. S. (1971). Statistical methods in medical research (Vol. 449). Oxford: Blackwell Scientific.

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic Concepts
2	Theoretical	Meta analysis
3	Theoretical	Life table analysis
4	Theoretical	kaplan meier analysis
5	Theoretical	kaplan meier analysis
6	Theoretical	Cox regression
7	Theoretical	Cox regression
8	Intermediate Exam	Midterm exam
9	Theoretical	Categorical Data Analysis
10	Theoretical	Probit analysis
11	Theoretical	Probit analysis
12	Theoretical	Logistic regression analysis
13	Theoretical	Logistic regression analysis
14	Theoretical	Loglinear models
15	Theoretical	Literature review and discussion
16	Final Exam	Final exam

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Assignment	1	10	0	10
Midterm Examination	1	10	2	12



Final Examination	1	10	2	12
	Total Workload (Hours)			48
	[Total Workload (Hours) / 25*] = ECTS			2
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To be able to comprehend and apply meta analysis in the field of health.
2	To be able to comprehend and apply survival analysis in the field of health.
3	To be able to comprehend and apply logistic regression analysis in the field of health.
4	To be able to comprehend and apply probit analysis in the field of health.
5	To be able to comprehend and apply longlinear model analysis in the field of health.

### Programme Outcomes (Biostatistics (Medical) Master)

1	To be able to understand the interdisciplinary interaction related with biostatistics.
2	to be able to use Theoretical and practical knowledge at the level of expertise.
3	To be able to interpret the information by integrating information from different disciplines and create new information
4	To be able to analyze the problems encountered by using research methods
5	to be able to conduct a study as an independent specialist
6	To be able to formulate solutions for complex unpredictable problems encountered by developing new approaches and taking responsibility.
7	To be able to resolve problems in environments that require leadership.
8	To be able to evaluate and direct knowledge and skills with a critical approach at the level of expertise.
9	To be able to give statistical advise at the begining stages of preparing health related projects
10	To be able to get the knowledge and the ability of using statistical packages

### 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	4	5	5	4	5
P2	5	4	4	5	4
P3	4	4	3	5	4
P4	4	4	5	5	4
P5	4		4	5	4
P6	4	4	4	4	4
P7	4	4	4	3	
P8	4	5		4	4
P9	4	5	5	5	4
P10	4	5	5	5	4

