



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

Course Title	Scientific Research Techniques								
Course Code	BİS504	Course Level			Second Cycle (Master's Degree)				
ECTS Credit	2	Workload	48 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The aim of this subject to review the major scientific research methods used in social sciences and teach students methods, by which they can find literature on a given topic, gather and analyze data, and write reports. Research design, conceptualization and operationalization, measurement, and sampling methods are also considered.								
Course Content	Scientific research and the scientific method, research design, research process, research plan, implementation, data collection methods and techniques, data sources, data analysis, preparation of research report								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study								
Name of Lecturer(s)	Prof. İmran KURT ÖMÜRLÜ, Prof. Mevlüt TÜRE								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Özdamar, K. (2003). Modern bilimsel araştırma yöntemleri. Kaan Kitabevi.
2	Çömlekçi, N. (2001). Bilimsel Araştırma Yöntemi ve İstatistiksel Anlamlılık Sınamaları. Bilim Teknik Yayınevi.
3	Neuman, W. L. (2008). Toplumsal Araştırma Yöntemleri Nitel ve Nicel Yaklaşımlar, (Sedef Özge, çev.), Cilt 1, 2. Baskı, İstanbul: Yayın Odası.
4	Wilson, E. B. (1990). An introduction to scientific research. Courier Corporation.

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic Concepts of science and research
2	Theoretical	Determining the Research Topic
3	Theoretical	Defining the Research Problem
4	Theoretical	Literature Review
5	Theoretical	Determination of Research Objectives
6	Theoretical	Determination of Research Variables and Scales
7	Theoretical	Determination of Research Hypothesis
8	Intermediate Exam	Midterm Examination
9	Theoretical	Sample Size Calculations
10	Theoretical	Data Collection Methods
11	Theoretical	Determination of Research Designs and Research Methods
12	Theoretical	Scientific Report Writing
13	Theoretical	Research and Article Review
14	Theoretical	Research and Article Review
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	0	10	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 define the basic terms related to research techniques
2	Explain the qualitative and quantitative research techniques
3	To be able to plan a research topic in conformity with scientific research methods
4	To be able to analyse the solution proposals of the research topic
5	To be able to report the research topic that's given in conformity with scientific rules

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 beginning 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	4	3	3	3
P2	3	3	3	3	4
P3	3	3	4	3	4
P4	5	4	3	4	5
P5	4	3	4	3	3
P6	4	4	3	3	3
P7	3	3	3	4	3
P8	4	3	4	3	4
P9	4	3	3	3	5
P10	2	4	2	4	5

