



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Scientific Research Methods							
Course Code		BYK534		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To introduce graduate students to basic concepts related to scientific research methods, to ensure that they have experienced the process of preparing a scientific research proposal, to apply their studies with appropriate research methods and techniques, and to obtain a written report in accordance with scientific writing rules and ethical rules. as their purpose.							
Course Content		The aim and definition of science, features of scientific knowledge, scientific knowledge and values system, the emergence and development of modern science, methods in social sciences, main research methods, data collection methods, measurement and test techniques							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), 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	Research Techniques and Report Writing, 1. Arıkan, R.2000.
2	Bilimsel Araştırma ve Yazma Teknikleri, Cebeci, S.2015, Alfa Yayınları, İstanbul.
3	Descriptive Statistical Techniques for Librarians. , Hafner, A.W. 1998.

Week	Weekly Detailed Course Contents	
1	Theoretical	Scientific Research Methods and Philosophy of Science
2	Theoretical	Research methodology
3	Theoretical	Determining the research topic
4	Theoretical	Defining the research problem
5	Theoretical	Literature review
6	Theoretical	Writing the hypothesis
7	Theoretical	Determining the research method and model
8	Intermediate Exam	Quiz
9	Theoretical	Data collection and analysis
10	Theoretical	Scientific research writing rules and techniques
11	Theoretical	Interpretation and report writing
12	Theoretical	Principles of scientific publication ethics
13	Theoretical	Ethical standards, legal limitations and software
14	Theoretical	Responsible research publication: international standards for authors
15	Theoretical	TÜBİTAK research and publication board regulation YÖK scientific research and publication ethics directive
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	3	56
Assignment	1	1	18	19
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

1	To be able to explain scientific research and its properties
2	To be able to prepare scientific research recommendation
3	To be able to apply appropriate research methods and techniques
4	To be able to search and cite literature
5	To learn data collection and analysis techniques

**Programme Outcomes** (*Biochemistry (Medical) Master*)

1	To have basic theoretical knowledge about biochemistry and to help understanding biochemistry
2	To have the basic laboratory knowledge, apparatus and methods used in biochemistry
3	Analysis: To be able to analyze information critically
4	Synthesis: To be able to synthesize and adapt the knowledge in the field from different directions
5	Evaluation: To critically evaluate research in the field

**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	5	5	4	5
P2	5	4	5	5	5
P3	5	5	5	5	5
P4	4	4	5	5	5
P5	5	5	4	4	4

