Biomedical Engineering (English)					
Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6		

Course Introduction and Application Information

Course Code:	UNI083			
Course Name:	Research Methods in English Literature			
Semester:	Fall			
Course Credits:	ECTS			
	5			
Language of instruction:	English			
Course Condition:				
Does the Course Require Work Experience?:	No			
Type of course:	University Elective			
Course Level:	Bachelor	TR-NQF-HE:6. Master`s Degree	QF- EHEA:First Cycle	EQF-LLL:6. Master`s Degree
Mode of Delivery:	Face to face			
Course Coordinator:	Araş. Gör. BURAK ASLAN			
Course Lecturer(s):				
Course Assistants:				

Course Objective and Content

Course	This course aims to familiarize students with the definition of research, research methods,
Objectives:	research question, hypothesis building, data collection and data analysis, data evaluation,
	interpretation and reporting, sample theses, source scanning methods, sample research
Course Content:	Definition of research, research methods, research question, hypothesis building, data collection and data analysis, data evaluation, interpretation and reporting, sample theses, source scanning
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Learning Outcomes

The students who have succeeded in this course;

1) To be able to recognize the main research tools, techniques and approaches

2) To be able to choose the best tools, techniques and approaches for conducting effective research and obtaining productive results.

3) To be able to organize research according to stages, stages and steps in order to conduct research more efficiently

4) Will be familiar with the basic elements of academic research reports and be able to create clear, wellorganized and in-depth analytical reports of their research

Course Flow Plan

Week	Subject	Related Preparation
1)	INTRODUCTION	
2)	How do we know what we know?	
3)	Qualitative Methods	
4)	Objectivity and Realism	
5)	Digital Methods	
6)	Annotated Bibliography: What and How	
7)	MIDTERM ASSIGNMENT (Research question and annotated bibliography due)	
8)	How to do Interviews	
9)	Ethnography	
10)	Literature Reviews: How to and Why	
11)	Quantitative Methods	
12)	Surveys: How To	
13)	Descriptive Statistics and Graphs	
14)	Ethics + Other Methods	

Sources

Course Notes /	• Nachmias, David. Research Methods in the Social Sciences. Worth Publishers, Inc; 6th
Textbooks:	Edition 2000 edition (2000).

References:	• Nachmias, David. Research Methods in the Social Sciences. Worth Publishers, Inc; 6th
	Edition 2000 edition (2000).
	Lecture notes

Course - Program Learning Outcome Relationship

Course Learning Outcomes	1	2	3	4		
Program Outcomes						
1) Adequate knowledge of mathematics, science and biomedical engineering disciplines; Ability to use theoretical and applied knowledge in these fields in solving complex engineering problems.						
2) Ability to identify, formulate and solve complex biomedical engineering problems; ability to select and apply appropriate analysis and modeling methods for this purpose.						
3) Ability to design a complex system, process, device or product to meet specific requirements under realistic constraints and conditions; ability to apply modern design methods for this purpose.						
4) Ability to select and use modern techniques and tools necessary for the analysis and solution of complex problems encountered in biomedical engineering practices; Ability to use information technologies effectively.						
5) Ability to design, conduct experiments, collect data, analyze and interpret results for the investigation of complex biomedical engineering problems or discipline-specific research topics.						
6) Ability to work effectively in disciplinary and multi-disciplinary teams; individual working skills.						
7) Ability to communicate effectively orally and in writing; knowledge of at least one foreign language, ability to write effective reports and understand written reports, to prepare design and production reports, to make effective presentations, to give and receive clear and understandable instructions.						
8) Awareness of the necessity of lifelong learning; the ability to access information, follow developments in science and technology, and constantly renew oneself.						
9) Knowledge of ethical principles, professional and ethical responsibility, and standards used in engineering practices.						
10) Knowledge of business practices such as project management, risk management and change management; awareness of entrepreneurship, innovation; information about sustainable development.						

11) Information about the effects of biomedical engineering practices on health, Course Learning Outcomes environment and safety in universal and social dimensions and the problems of the age	1	2	3	4
reflected in the field of engineering; Awareness of the legal consequences of biomedical				
engineering solutions.				

Course - Learning Outcome Relationship

No Effect	1 Lowest	2 Average	3 Highest

	Program Outcomes	Level of Contribution
1)	Adequate knowledge of mathematics, science and biomedical engineering disciplines; Ability to use theoretical and applied knowledge in these fields in solving complex engineering problems.	
2)	Ability to identify, formulate and solve complex biomedical engineering problems; ability to select and apply appropriate analysis and modeling methods for this purpose.	
3)	Ability to design a complex system, process, device or product to meet specific requirements under realistic constraints and conditions; ability to apply modern design methods for this purpose.	
4)	Ability to select and use modern techniques and tools necessary for the analysis and solution of complex problems encountered in biomedical engineering practices; Ability to use information technologies effectively.	
5)	Ability to design, conduct experiments, collect data, analyze and interpret results for the investigation of complex biomedical engineering problems or discipline-specific research topics.	
6)	Ability to work effectively in disciplinary and multi-disciplinary teams; individual working skills.	
7)	Ability to communicate effectively orally and in writing; knowledge of at least one foreign language, ability to write effective reports and understand written reports, to prepare design and production reports, to make effective presentations, to give and receive clear and understandable instructions.	
8)	Awareness of the necessity of lifelong learning; the ability to access information, follow developments in science and technology, and constantly renew oneself.	
9)	Knowledge of ethical principles, professional and ethical responsibility, and standards used in engineering practices.	

10)	Knowledge of business practices such as project management, risk management and	
	change management; awareness of entrepreneurship, innovation; information about	
	sustainable development.	
11)	Information about the effects of biomedical engineering practices on health, environment and safety in universal and social dimensions and the problems of the age reflected in the field of engineering; Awareness of the legal consequences of biomedical engineering	
	solutions.	

Assessment & Grading

Semester Requirements	Number of Activities	Level of Contribution
Midterms	1	% 50
Final	1	% 50
total		% 100
PERCENTAGE OF SEMESTER WORK		% 50
PERCENTAGE OF FINAL WORK		% 50
total		% 100

Workload and ECTS Credit Calculation

Activities	Number of Activities	Preparation for the Activity	Spent for the Activity Itself	Completing the Activity Requirements	Workload
Course Hours	14	0	3		42
Study Hours Out of Class	16	0	5		80
Midterms	1	0	2		2
Final	1	0	2		2
Total Workload					126