OSTIM TECHNICAL UNIVERSITY
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES
COURSE SYLLABUS FORM
2022-2023 FALL

BUS 402 Research Methods in Social Sciences							
Course Name	**Course Code**	**Period**	**Hours**	**Application**	**Laboratory**	**Credit**	**ECTS**
Research Methods in Social Sciences	BUS 402	7	3			3	4

Language of Instruction	English
Course Status	Compulsory
Course Level	Bachelor
Learning and Teaching Techniques of the Course	Lecture, Question-Answer, Problem Solving, Teamwork, Report Writing

Course Objective

The main purpose of this course is to examine the research process (problem identification, data collection, data analysis and interpretation of results), to review certain scientific research methods (experimental method, descriptive method, etc.) and to find the research question necessary for students to conduct research on a particular topic.
The aim of the course is to learn the techniques of hypothesis building, conceptualization, operationalization, measurement, data collection, data analysis, data evaluation/interpretation and report writing.

Learning Outcomes

On successful completion of this course, candidates should be able to:

- Explain the concepts of scientific method and philosophy of science,
- Comprehends the stages of scientific research process,
- Knows the conceptual framework, research designs, data collection techniques, universe and sample, measurement and analysis types and uses them in scientific studies,
- Publication ethics, explains the concepts of plagiarism, uses plagiarism programs,
- Will be able to write a research proposal.

Course Outline

Because of the rapid growth of qualitative and mixed methods in business management, this course

carefully cover these methods to complement the more traditional methods and to add to each student's repertoire of research skills. A second overarching goal that has been maintained the course is to present information in a way that is understandable to students.		
Weekly Topics and Releated Preparation Studies		
Weeks	**Topics**	**Preparation Studies**
1	Introduction Choosing your research topic Reviewing the literature critically	✓ Choosing the right research topic 2-4 ✓ How to refine research topic ideas 11 ✓ What makes a good research topic? 15 ✓ How to turn a research idea into a research project 18
2	Managing the research process Choosing your research design	✓ Getting access to your research organisation, respondents and participants 59 ✓ What about access to information? 61
3	Sampling Questionnaire Surveys	✓ Define the Population and Sampling Frame. 94 ✓ Sampling Method. 96 ✓ Probability Samples 96 ✓ Non-probability Samples 99 ✓ Sample Size 101
4-5	Analysing data	✓ Different types of data 180 ✓ Analysing data quantitatively 183
6-7	Writing and presenting the research proposal	✓ The importance of the research proposal 216 ✓ When you should write your research proposal 220 ✓ What you should include in your research proposal 220 ✓ The style you should use to write your research proposal 227 ✓ How your research proposal will be judged 231
8	**MIDTERM EXAM**	
9	Quantitive Analysis Simple Analysis Techniques	✓ Using Software 112 ✓ Simple Analysis Techniques. 114 ✓ Cleaning the Data 115 ✓ Analytical Techniques for One Variable. 117
10	Hypothesis Testing	✓ Hypothesis Tests and Error 148 ✓ The T-test 151 ✓ Analysis of Variance: One-way ANOVA 161 ✓ Testing Correlation Coefficients 68
11	Hypothesis Testing	✓ Chi-square Test (Chi2)164
12	Analytical Techniques for Relationships between Variables (Reliability and Correlation Analysis)	✓ Analytical Techniques for Relationships between Variables 128
13	Regression Analysis	✓ Introduction 171

		✓ Simple Regression Analysis . 174 ✓ Estimating Regression Parameters 175 ✓ The T- 182 ✓ Multiple Regression Analysis. 184 ✓ Explained Variance . 185
14	Factor Analysis	✓ Exploratory Factor Analysis 225 ✓ Principal Component Analysis 227 ✓ Running Exploratory Factor Analysis 227 ✓ Unidimensionality 240
15	Factor Analysis General Overview	✓ Confirmatory Factor Analysis 241
16	**FINAL EXAM**	

Textbook (s)/References/Materials:

- Saunders, M., & Lewis, P. (2017). Doing research in business and management. Pearson.
- Lawrence Neuman, W. (2014). Social research methods: Qualitative and quantitative approaches.
- Sallis J.E., Gripsrud G., Olsson U.H., Silkoset R. (2021) Research Methods and Data Analysis for Business Decisions. Classroom Companion: Business. Springer,
- Piet Verschuren & Hans Doorewaard (2010) Designing a Research Project (2nd Edition) Eleven International Publishing
- Barbara Gastel & Robert A. Day (2016) How to Write and Publish a Scientific Paper-GreenWood
- Douglas C. Montgomery (2020) Design and Analysis of Experiments-Wiley
- Andy Field & Dr Graham J Hole -(2003) How to Design and Report Experiments- Sage Publications Ltd
- Daniel J. Denis (2021) Applied Univariate, Bivariate, and Multivariate Statistics_ Understanding Statistics for Social and Natural Scientists, With Applications in SPSS and R-John Wiley & Sons
- Peter Bock (2001) Getting It Right R&D Methods for Science and Engineering-Academic Press
- David V. Thiel (2014) Research Methods for Engineers. 1-Cambridge Uni Press
- Andy Field (2018) Discovering Statistics Using IBM SPSS Statistics-Sage Publications Ltd
- Dr. Arlene G. Fink -(2002) The Survey Kit, 2nd edition, The Survey Handbook 1-Sage Publications, Inc

Assessment		
Studies	**Number**	**Contribution margin (%)**
Attendance		
Lab		
Classroom and application performance grade		
Field Study		
Course-Specific Internship (if any)		
Quizzes / Studio / Critical		
Homework	**1**	**20**
Presentation		
Projects		
Report		
Seminar		
Midterm Exam/Midterm Jury	**1**	**30**
General Exam / Final Jury	**1**	**50**
	Total	**100**
Success Grade Contribution of Semester Studies		**50**
Success Grade Contribution of End of Term		**50**
	Total	**100**

ECTS / Workload Table			
Activities	**Number**	**Duration (Hours)**	**Total Workload**
Course hours (Including the exam week: 16 x total course hours)	16	2	32
Laboratory			
Application			
Course-Specific Internship			
Field Study			
Study Time Out of Class	16	2	32
Presentation / Seminar Preparation			
Projects			
Reports			
Homework	4	8	32
Quizzes / Studio Review			
Preparation Time for Midterm Exam / Midterm Jury	1	4	4
Preparation Period for the Final Exam / General Jury	1	4	4
Total Workload/25 hours	**(104/25 = 4.16)**		
ECTS	**4**		

Relationship Between Course Learning Outcomes and Program Competencies						
No	**Learning Outcomes**	**Contribution Level**				
		1	**2**	**3**	**4**	**5**
LO1	To explain the concepts of scientific method and philosophy of science,					X
LO2	To comprehends the stages of scientific research process,					X
LO3	To knows the conceptual framework, research designs, data collection techniques, universe and sample, measurement and analysis types and uses them in scientific studies,					X
LO4	To publication ethics, explains the concepts of plagiarism, uses plagiarism programs,					X
LO5	Will be able to write a research proposal.					X
LO6	To define hypothesis testing and explain the steps in hypothesis testing.					X
LO7	To explain the basics of writing a professional, informative, and accurate research report.					X

Relationship Between Course Learning Outcomes and Program Competencies									
No	**Program Competencies**	**Learning Outcomes**							**Total Effect (1-5)**
		LO1	**LO2**	**LO3**	**LO4**	**LO5**	**LO6**	**LO7**	
1	Know the basic concepts and practical information about the science of business administration and core business activities	X	X					X	3
2	Evaluate global and local issues by using ideas and concepts from the field of business administration; examine and analyze management related information and applications in line with scientific principles by using appropriate qualitative and quantitative methods; interpret and synthesise the data and find solutions to business related problems	X		X			X	X	4
3	Take responsibility as a member of an interdisciplinary team to solve unpredictable and complex business problems; be able to work effectively in teams of various functions and disciplines; effectively carry out project activities	X	X	X		X			4
4	Carry out independent studies in the field by utilizing obtained knowledge and skills	X		X		X		X	4
5	Set goals and objectives for the institution he/she works at; detect and solve basic problems; analyze the internal and external environment of the business; evaluate the developments, support continuous improvement and provide innovative strategies	X	X		X				3
6	Acquire the skill to manage activities aimed at the improvement of the employees as a leader, make decisions and implement them		X	X		X	X		4
7	Acquire the entrepreneurship skill; design and manage a business; promote innovativeness and sustainability	X	X			X		X	4
8	Maintain life-long learning activities; achieve self-improvement; follow higher level educational programs	X	X				X		3
9	Inform stakeholders with a sense of social responsibility as an individual with effective communication skills; share his/her emotions, thoughts and solutions to problems verbally and in writing; understand the behaviors and psychology of his/her colleagues	X		X		X	X		4
10	Use the information and communication technologies and computer software				X	X		X	3

	required by the field								
11	Effectively use English to follow, read, write and speak about the universal information in the field of business and management sciences and be able to communicate with colleagues in a foreign language with professional proficiency	X	X	X		X			4
12	Act according to the law in all his/her affairs; have a sense of professional and ethical responsibility and code of business conduct and act in line with social values	X	X				X	X	4
13	Be aware of the contemporary business problems as well as the interdisciplinary scope of business administration and analyze these; have the competence to understand the effects of business and management sciences on these problems on a universal, environmental, legal, social and societal level and in terms of health, security and globalization	X	X		X			X	4
14	Give research proposals, be able to design research studies, prepare and present research reports	X		X		X	X		4
15	Manage work time and personal time; fulfil the requirements of his/her duties on time								
16	Have the competence to work in non-governmental organizations, private sector and public entities	X	X		X		X	X	5
Total Effect									57

Policies and Procedures
Web page: https://www.ostimteknik.edu.tr/business-administration-1240/907
Exams: The exams aim at assessing various dimensions of learning: knowledge of concepts and theories and the ability to apply this knowledge to real-world phenomena, through analyzing the situation, distinguishing problems, and suggesting solutions. The written exams can be of two types, ie. open-ended questions, which can also be in the form of problems or multiple-choice questions. The case could also be carried to the Dean's Office for additional disciplinary action.
Assignments: Homework (Assignments) might be applicable. Scientific Research Ethics Rules are very important while preparing assignments. The students should be careful about citing any material used from outside sources and reference them appropriately.
Missed exams: Any student missing an exam needs to bring an official medical report to be able to take a make-up exam. The medical report must be from a state hospital.
Projects: Applicable.
Attendance: Attendance requirements are announced at the beginning of the term. Students are usually expected to attend at least 70% of the classes during each term.
Objections: If the student observes a material error in his/her grade, he/she has the right toplace an objection to the Faculty or the Department. The claim is examined and the student is notified about its outcome.