RESEARCH METHODS IN EDUCATION

1	Course Title:	RESEARCH METHODS IN EDUCATION	
2	Course Code:	MBZ0006	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç. Dr. DİLEK ZEREN ÖZER	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Eğitim Fakültesi İlköğretim Bölümü Fen Bilgisi Eğitimi Anabilim Dalı A Blok Görükle /BURSA Tel: 0 224 2942254 E-posta: dzeren@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	Basic concepts and principles of research methods; research process (recognizing the problem, identifying the problem and sample, collecting and analyzing data, interpreting the results); general characteristics of data collection tools; analysis and evaluation of data; access to articles, theses and databases; research models and types; basic paradigms in scientific research; quantitative and qualitative research designs; sampling in qualitative research, data collection, data analysis; validity and safety in qualitative research; reviewing, evaluating and presenting articles or thesis; preparing a research report in accordance with research principles and ethics; action research in education.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	The student discusses the problems in educational research.
		2	The student knows the principles of quantitative research.
		3	The Student knows research strategies and design types.
		4	The student knows sampling strategies in quantitative and qualitative research.
		5	The student knows the principles of qualitative research.
		6	The Student analyzes research.
		7	The Student criticizes research methods.
		8	
		9	
		10	
21	Course Content:		

	Course Content:	
Week	Theoretical	Practice
1	What is information? Source of information What is Science?	
2	Stages of the History of Science Characteristics and characteristics of science Types of Scientific Knowledge: Case, Hypothesis, Theory, Law Science Paradigm Relation	
3	Definition of Scientific Method Scientific Method Stages Basic characteristics of scientific method Basic assumptions on which scientific method is based Basic Concepts in Scientific Research Definition and Characteristics of Research Research Types Origins of research Epistemological foundations of research	
4	204/5000 Research problem, universe, sample and changing concepts Determination of research problem Determination of the research topic Choosing the research problem Development of Sub-Problems	
7	Methods used in researches and their classification Research methods 1) Descriptive research: screening, special case, developmental research method, comparative method 2) Interpretative research: Ethnographic research method, special case study, researcher teacher method (action), phenomonographic	
8	Midterm	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self studyies for preparations	13	2.00	26.00
Homeworks	1	35.00	35.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	1.00	1.00
Others	0	0.00	0.00
Final Exams	1	1.00	1.00
Total Work Load			91.00
Total work load/ 30 hr			3.03
ECTS Credit of the Course			3.00

9	Methods used in researches and their classification Analytical research, Document analysis, historical research method Experimental research, full experimental method, quasi-experimental method, simple experimental method.	
10	299/5000 Methods used in researches and their classification 1) Mixed investigations: Descriptive, Exploratory / explorer, triangulation, embedded, 2) Didactical engineering Data collection, analysis and presentation Data collection sources Secondary data collection sources Literature review	
11	Data collection, analysis and presentation Meta analysis Difference between literature review and metaanalysis Primary data sources Interview Interview types Observation Types of observation	
12	Analysis of qualitative data Descriptive analysis Content analysis Qualitative data analysis checklist Survey method Question types in surveys Survey validity Reliability of tests used in surveys Survey form features Data obtained from daily studies Researcher's diary Log of the sample	
13	Validity, Reliability and Validity in research Reliability in research Data tables and graphical representation Editing the data Chart types	
14	Concepts of Scientific Ethics	
22	Textbooks, References and/or Other Materials:	Clark, V.P. & Creswell, J. W. (2009). Understand Çepni, S. (2014) Araştırma ve Proje Çalışmalarına Giriş. Celepler Matbaacılık. Metin, M. Ed. (2014) Kuramdan Uygulamaya Eğitimde Bilimsel Araştırma Yöntemleri. Pegem Yayıncılık Karasar, N. (2014) Bilimsel Araştırma Yöntemi. Nobel Yayıncılık. Sönmez, V. Ve Alacapınar, F.G. (2013) Örneklendirilmiş Bilimsel Araştırma Yöntemleri. Anı Yayıncılık. Doğan, M. (2013) Bilim ve Teknoloji Tarihi. Anı yayıncılık Kalaycı, Ş. Ed. (2006) SPSS Uygulamalı çok değişkenli istatistik teknikleri. Asil Yayın Dağıtım Can, A. (2014) SPSS ile Bilimsel Araştırma Sürecinde Nicel Veri Analizi. Pegem Yayıncılık. Şencan, H. (2005) Sosyal ve Davranışsal Ölçümlerde Güvenirlik ve Geçerlilik. Seçkin Yayıncılık Arseven, A. D. (1994). Alan Araştırma Yöntemi. Ikeler-Teknikler- Örnekler. Ankara: Gül Yayınevi. Aziz, A. (1994). Araştırma Yöntemleri - Teknikleri ve İletişim. Ankara: Turhan Kitabevi

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Kaptan, S. (1995). Bilimsel Araştırma ve İstatistik Teknikleri. Ankara: Gazi Üniversitesi Gazi Eğitim Fakültesi Eğitim Bilimleri Bölümü
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Karasar, N. (1998). Bilimsel Araştırma Yöntemi: Kavramlar, İlkeler, Teknikler. Sekizinci basım. Ankara: Nobel Yayıncılık.
Kuş Saillard, E. (2008). NVIVO 8 İle Nitel Araştırma Projeleri. Ankara: Anı Yayıncılık.
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Kartal, M. (2006) Bilimsel Araştırmalarda Hipotez testleri Ankara: Nobel Yayıncılık
Timur, M. ve Çağıltay, F. (2008). Proje hazırlama tekniği Ankara: Nobel Yayıncılık
Kağıtçıbaşı, Ç. (1976). "Ölçme ve Ölçekleme," Toplum Bilimlerinde Araştırma ve Yöntem. Der.: Ruşen Keleş. Ankara: TODAİE
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Bogdan, R.C., & Biklen, S. K. (1992). Qualitative research for education: An introduction to theory and methods. Needham Heights,
MA: Allyn and Bacon.
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Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage Publication.
Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory, procedures and techniques, Thousand Oaks, CA:
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connection. Washington, DC: COSMOS Cooperation.
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23	Assesment

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	15.00
Quiz	0	0.00
Home work-project	1	25.00
Final Exam	1	60.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00

Total	100.00
Measurement and Evaluation Techniques Used in the Course	

24	ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	0	5	0	0	5	0	0	0	5	2	0	0	0	0	0	0
ÖK2	0	5	0	5	0	0	0	0	0	0	0	0	0	0	5	0
ÖK3	0	5	0	5	0	0	0	0	0	0	0	0	0	0	5	0
ÖK4	0	5	5	0	5	0	0	0	0	5	0	0	0	0	0	0
ÖK5	0	5	0	5	0	0	0	0	0	0	0	0	0	0	5	0
ÖK6	0	4	0	0	5	0	0	0	4	5	0	0	0	0	5	0
ÖK7	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High