SCIENTIFIC RESEARCH METHODS

1	Course Title:	SCIENTIFIC RESEARCH METHODS
2	Course Code:	RES3011
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	5
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	-
12	Language:	German
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör. MÜGE GÜLTEKİN
15	Course Lecturers:	-
16	Contact information of the Course Coordinator:	mgultekin@uludag.edu.tr +90 (224) 294 25 73 Uludağ Üniversitesi Eğitim Fakültesi Güzel Sanatlar Eğitimi Bölümü Resim-İş Eğitimi Anabilim Dalı Görükle Kampüsü Görükle/Bursa TÜRKİYE
17	Website:	
18	Objective of the Course:	This course aims to introduce students the process of scientific research and the methods used in research. It also aims to teach students the methods and techniques used in literature survey, data collection and analysis and writing reports.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	To be able to explain the method of scientific research
	2	To be able to define research process
	3	To be able to list the sections of a scientific article
	4	To be able to explain the importance of the rules used in the preparation of scientific research
	5	To be able to make a literature survey for a scientific research
	6	To be able to explain different data collection methods
	7	To be able to understand how to use tables, figures, numbers and footnotes in a scientific article
	8	To be able to make references correctly
	9	To be able to explain the ethical rules that should to be obeyed during a scientific research
	10	-
21	Course Content:	

Course Content:

Week	Theoretical	Practice

1	To inform the students about the course content, the aim and the outcomes of the course. To give information about science, scientific method, scientific research, the phases of scientific research, the qualities of scientific data, truthfulness, trustworthiness and scientific language in research using a PowerPoint presentation.	
2	To explain and compare qualitative and quantitative research approaches with examples in a PowerPoint presentation.	
3	To discuss the “Introduction” part of research process and techniques. To explain the concept of problem, the causes of problems, the choice of problem and criteria and the concept of variable using a PowerPoint presentation To examine examples of scientific research.	
4	To explain the topics such as aim, importance, hypotheses, limitations and definitions which are involved in the “Introduction” part of research process using a PowerPoint presentation. To examine examples of scientific research.	
5	To discuss the “Methodology” part of the research process and techniques. To explain the following topics, which are involved in the “Methodology” part of research process using a PowerPoint presentation. To examine examples of scientific research.	
6	To explain Plagiarism, the process of creating reports and criteria in creating reports using data resources and literature survey as a method of data collection. To examine examples of scientific research.	
7	To explain the characteristics, phases, advantages and disadvantages of questionnaire and observations as data collection methods using s PowerPoint presentation. To examine examples of scientific research.	
8	To explain the characteristics, phases, advantages and disadvantages of interview as a data collection method using s PowerPoint presentation. To examine examples of scientific research.	
9	To explain the methods of focus group interviews, case studies, and action research using examples. To explain the data analysis process with a PowerPoint presentation. To examine examples of scientific research.	
10		
11		

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	4.00	56.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	16.00	16.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			120.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

12	To discuss the topics such as result types, presentation and interpretation of results, which are involved in the “Findings and Discussion” part of the research process with a PowerPoint presentation. To examine examples of scientific research.	
13	To discuss the ‘Summary, Conclusions and Suggestions” part of the research process with a PowerPoint presentation. To examine examples of scientific research	
14	To explain the concept of ethics, the research ethic and the ethical issues concerning participants using examples.	

22	Textbooks, References and/or Other Materials:	BALCI, Ali, Sosyal Bilimlerde Araştırma Yöntem, Teknik ve İlkeler, Pegem A Yayıncılık, Ankara, 2007. BÜYÜKÖZTÜRK, Şener, Ebru Kılıç Çakmak, Funda Demirel, Özcan Erkan Akgün, Şirin Karadeniz, Bilimsel Araştırma Yöntemleri, Pegem A Yayıncılık, Ankara, 2010. YILDIRIM, Ali, Hasan Şimşek, Sosyal Bilimlerde Nitel Araştırma Yöntemleri, Seçkin Yayıncılık, Ankara, 2005. Ünalan, H. Turgay, Müge Gültekin, S. Esin Erol, Türkiye Kaynaklı Sanat Eğitiminde Makale Bibliyografyası, Maya Akademi Yayınları, 2011, Ankara. Gay, L. R., Geoffrey E. Mills, Peter Airasian, Educational Research, Pearson Merrill Prentice Hall, Ohia, 2006. DAY, Robert, A., Bilimsel Bir Makale Nasıl Yazılır ve Yayımlanır?, Tübitak Yayınları, Ankara, 1996. GÜLBAHAR; Kural, Muzaffer Üstdal, Bilimsel Araştırma (Nasıl Yapılır Nasıl Yazılır), Beta Yayınevi, İstanbul, 1997. KARASAR, Niyazi, Bilimsel Araştırma Yöntemi, Nobel Yayıncılık, İstanbul, 2010. DİNLER, Zeynep, Bilimsel Araştırma ve E-Kaynaklar, Ekin Basım Yayın, Bursa, 2012. AKIN, Galip, Bilimsel Araştırma ve Yazım Teknikleri, Tiydem Yayıncılık, Ankara, 2009. CEBECİ, Suat, Bilimsel Araştırma ve Yazım Teknikleri, Alfa Basım Yayın, İstanbul, 2010. ŞENCAN, Hüner, Sosyal ve Davranışsal Bilimlerde Bilimsel Araştırma, Seçkin Yayıncılık, Ankara, 2007. YÜKSEL, Atila, Burak Mil, Yasin Bilim, Nitel Araştırma Neden Nasıl Niçin?, Detay Yayıncılık, Ankara, 2007 KUŞ, Elif, Nicel-Nitel Araştırma Teknikleri, Anı Yayıncılık, Anlara, 2009.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	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	5	4	1	2	0	0	5	5	0	4	2	0	0	0	0	0
ÖK2	4	5	3	0	0	3	5	5	0	3	3	0	0	0	0	0
ÖK3	4	5	0	0	0	0	5	5	0	3	3	0	0	0	0	0
ÖK4	0	5	0	0	0	3	5	5	0	4	3	0	0	0	0	0
ÖK5	5	5	2	4	0	1	5	5	0	5	5	0	0	0	0	0
ÖK6	4	5	0	5	0	4	5	5	0	5	5	0	0	0	0	0
ÖK7	3	4	0	0	0	3	5	5	0	3	0	0	0	0	0	0
ÖK8	3	4	0	0	0	3	5	5	0	4	3	0	0	0	0	0
ÖK9	2	4	3	3	0	3	5	5	0	4	4	0	0	0	0	0
ÖK10	0	0	0	0	0	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**						