SCIENTIFIC RESEARCH TECHNIQUES AND RESEARCH ETHICS

1	Course Title:	SCIENTIFIC RESEARCH TECHNIQUES AND RESEARCH ETHICS	
2	Course Code:	SOS5101	
3	Type of Course:	Compulsory	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	8.00	
8	Theoretical (hour/week):	3.00	
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:	Prof. Dr. Muammer DEMİREL	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Prof. Dr. Muammer Demirel mdemirel@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	This course aims to examine the objective scientific research process (problem determination, data collection, data analysis and interpretation of results), to observe the main scientific research methods (experimental method, description method etc.) and to find the research question (hypothesis), conceptualization, measurement, data collection, data analysis, data evaluation / interpretation and report writing techniques. This will emphasize the concept of ethics and ethical theories, research ethics and publishing ethics, and ethical behavior. The most common violations of research and publications and their methods of prevention are to give information and awareness about what is the way to be followed in case of violation detection.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To understand the scientific research techniques
		2	To understand and to analyze the ethical aspects of certain situations related to science and technology
		3	To comprehend ethical theories,scientific research and publication ethics and all aspects of the concept of professional ethics
		4	To design and conduct a scientific research in accordance with ethical rules
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21	Course Content:		

	Course Content:	
Week	Theoretical	Practice
1	Scientific research and scientific research process	
2	Scientific research methods (Qualitative Research)	
3	Scientific research methods (Quantitative Research)	
4	Measurement instruments used in scientific research	
5	Data collection and analysis processes	
6	Validity and reliability concepts	
7	Identification of research problem and hypothesis	
8	The concept of ethics and profession	
9	Ethical theories	
10	The concept and basic principles of research ethics	
11	Unethical behavior and ethical violations during the research process	
12	The concept and basic principles of publication ethics	
13	Unethical behavior and ethics violations in the publication process	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	8.00	112.00
Homeworks	1	30.00	30.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	20.00	20.00
Others	0	0.00	0.00
Final Exams	1	30.00	30.00
Total Work Load			234.00
Total work load / 30 hr			7.80
ECTS Credit of the Course			8.00

22 Textbooks, References and/or Other

Creswell, J. W. (2014). Nitel, Nicel Araştırma Deseni ve Quantitative, Qualitative, and Mixed Methods Approaches, A. Altay). TÜBİTAK, Ankara. Karasar, N. (2004) Yöntemi: Kavramlar, İlkeler, Teknikler, 15. Baskı. Nobel

23 Assesment

TERM LEARNING ACTIVITIES	NUMBE	WEIGHT
Midterm Exam	1	20.00
Home work-project	1	40.00
Final Exam	1	40.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		60.00
Contribution of Final Exam to Success Grade		40.00
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	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**				