

RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN PHYSICS

1	Course Title:	RESEARCH TECHNIQUES AND PUBLICATION ETHICS IN PHYSICS	
2	Course Code:	FEN5000	
3	Type of Course:	Compulsory	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. AHMET CENGİZ	
15	Course Lecturers:	Prof. Dr. Ahmet CENGİZ Prof. Dr. Mürsel ALPER	
16	Contact information of the Course Coordinator:	Prof. Dr. Ahmet CENGİZ B. U. Ü. Fen-Edebiyat Fakültesi Fizik Bölümü 16059 Görükle Bursa email: acengiz@uludag.edu.tr Tel: 0224 2941695	
17	Website:		
18	Objective of the Course:	To give how to do research, important points of research and especially tips for publishing articles. Knowing and applying the ethical rules	
19	Contribution of the Course to Professional Development:	Determines the research topic, knows how to search the literature. The research determines the theory and model. Knows how to analyze outcomes. Knows science and publishing ethics.	
20	Learning Outcomes:		
		1	Knows the meaning of research
		2	Knows the research methods
		3	Writes the research as a report and thesis
		4	Prepares articles from the research
		5	Prepares the article according to IMRAD rules
		6	Knows what should be written in the abstract
		7	Knows the tips of what should be written in the introduction of the article
		8	Knows what should be explained in the main body of the article
		9	Knows to present the Results and Discussion
		10	Knows ethical rules, rights, permissions
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	1. Science and Scientific Knowledge 2. Purposes and Types of Scientific Research 3. Planning the Research		

2	4. Research Methods 4.1 Experimental Research Methods 4.2 Field Studies 4.3 Introductory Studies 4.4 Statistical Research			
3	5. Data Types and Data Collection Methods			
4	6. Data Arrangement and Analysis			
5	7. Writing a Report / Thesis 7.1 Parts of the Research 7.2 Rules for Reference and Footnote 7.3 Text / Information Transfers and Ethical Values 7.4 Table Figures and Graphics 7.5 Effective Writing and Spelling Rules 7.6 Punctuation Marks 7.7 Words that must be written contiguously			
6	8. Article Preparation 8.1 Submitting Article Title 8.2 Order of Author's Names and Address Representation 8.3 Abstract Writing IMRAD Rules 8.4 Writing the Introduction and Highlights			
7	8.5 Writing Material, Experiment, Theory and Method, Important Points and Ethical Values			
8	8.6 Writing the Results and Discussion			
9	8.7 References, Citation and Ethical Values			
Activites		Number	Duration (hour)	Total Work Load (hour)
11	Theoretical 10. Evaluation of Referee Reports	14	2.00	28.00
Practicals/Labs		0	0.00	0.00
13	Self study and preparation 12. Completion of an Article Written with	14	1.00	14.00
Homeworks		4	4.00	16.00
14	Projects 13. Publication Scan and Highlights	0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm Exams:	Materials:	2	0.00	0.00
Others		0	0.00	0.00
Final Exams		3	2.00	6.00
Total Work Load				60.00
Total work load/ 30 hr		4	2.00	8.00
ECTS Credit of the Course				2.00
		5. https://www.texstudio.org		
23	Assesment			
TERM LEARNING ACTIVITIES		NUMBE R	WEIGHT	
Midterm Exam		0	0.00	
Quiz		0	0.00	
Home work-project		0	0.00	
Final Exam		1	100.00	
Total		1	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		0.00		
Contribution of Final Exam to Success Grade		100.00		

Total									100.00								
Measurement and Evaluation Techniques Used in the Course									The system of relative evaluation is applied.								
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	5	4	5	4	5	4	5	5	4	0	0	0	0	0	0	
ÖK2	4	5	5	4	5	4	5	4	5	5	0	0	0	0	0	0	
ÖK3	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	
ÖK4	4	5	4	5	4	5	4	4	4	5	0	0	0	0	0	0	
ÖK5	5	5	4	5	5	5	5	5	5	5	0	0	0	0	0	0	
ÖK6	5	4	5	4	5	4	4	4	5	4	0	0	0	0	0	0	
ÖK7	5	5	4	5	4	5	5	5	5	5	0	0	0	0	0	0	
ÖK8	5	5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	
ÖK9	4	4	5	5	4	4	5	5	4	4	0	0	0	0	0	0	
ÖK10	5	5	4	4	4	4	5	5	5	5	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				