

RELATIVISTIC QUANTUM MECHANICS I

1	Course Title:	RELATIVISTIC QUANTUM MECHANICS I	
2	Course Code:	FZK5209	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	3.00	
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:	Dr. Öğr. Üyesi ZERRİN KIRCA	
15	Course Lecturers:	Yrd. Doç. Dr. Zerrin KIRCA, Doç. Dr. Cem Salih ÜN	
16	Contact information of the Course Coordinator:	Yrd. Doç. Dr. Zerrin KIRCA E-mail: zkirca@uludag.edu.tr İş Tel:(0224)2941704 Adres: UÜ Fen Edebiyat Fakültesi, Fizik Bölümü, 16059 Görükle Kampüsü, Bursa	
17	Website:		
18	Objective of the Course:	The aim of this course is to provide information about quantization of fields and mathematical structure of relativistic quantum mechanics. Also relativistic quantum mechanics is provide basic concepts of the quantum field theory	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To learn the basic conceptual foundations of the relativistic quantum mechanics.
		2	To learn mathematical structure of the relativistic quantum mechanics.
		3	To learn quantized field equations according to spin states
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21	Course Content:		
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Week	Theoretical	Practice	
1	Special relativity (review), description of four vector, metric		
2	Special relativity; Proper time, Physics in flat spacetime		

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