



**Code and Name:**

## FİZ5440 APPLICATION OF MATHEMATICAL METHODS IN PHYSICS

**Unit:**

Graduate School of Natural and Applied Sciences

**Detail:**

**Period:** 2023-2024

**Status:** Optional

**Class:** 1

**Credits:** 3-0-0-3

**ECTS:** 6

**Language:** Turkish

### INSTRUCTOR

Title, Name and Surname: -

Phone: -

Email: -

Social Account: -

Student Day and Time: -

### COURSE ASSISTANT

Title, Name and Surname: .....

Phone: .....

Email: .....

Social Account: .....

Student Day and Time: .....

**Lessons**

**Monday**

**Tuesday**

**Wednesday**

**Thursday**

**Friday**

**Saturday**

**Weekly**

**Program:**

-

**Rendering:**

Face-to-face lessons per week 3 It will be done on an hourly basis.

**Place:**

YY: Department of Physics Electromagnetic Wave Laboratory -

UE: -

**Purpose:**

Analysis of applications of mathematical methods in physics

**Material:**

Mathematics methods textbook and lecture notes

**Student**

**Responsibility**

:

Weekly Lesson Plan	Week	Topic			Method	
	1	Second-order differential equations			YY	
	2	Orthogonal functions			YY	
	3	Gamma and Beta functions			YY	
	4	Special functions of physics			YY	
	5	Fourier Serisi			YY	
	6	Integral equations and transformations			YY	
	7	Principle of change: complex integrals and series			YY	
	8	Infinite series			YY	
	9	Green's functions			YY	
	10	Matrices			YY	
	11	Special functions			YY	
	12	Bessel Fnksiyons			YY	
	13	Operators			YY	
	14	What We Learned and Summary			YY	
Assessment and Evaluation	Method				Number	Weight
	Break Exam	Exam	Face		1	% 50
		Quiz	-		-	
		Homework	-			
		Project	-		-	-
General Exam	Face			1	% 50	
Course Outcomes:	1	Some mathematical methods PC Applied to physical processes through a mak				
	2					
	3					
	4					
	5					

### Course-Specific Explanations:

UE: Distance Education; YY: Face-to-Face Education



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FIRAT UNIVERSITY  
**Course Syllabus Form**

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