



Code and Name:

FIZ 5170 INTRODUCTION TO 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:

Learning some mathematical methods and their applications in physics

Material:

Mathematical Methods in Physics Book and Lecture Notes

Student

Responsibility

:

Weekly Lesson Plan

Week	Topic	Method
1	Vector analysis	YY
2	Coordinate systems	YY
3	Tensor analysis	YY
4	Determinantlar	YY
5	Matrices	YY
6	Group theory	YY
7	Infinite series: expansion of functions into series	YY
8	Functions of complex variables	YY
9	Legendre equation and Polynomials	YY
10	Laguerre Polynomials	YY
11	Hermic Polynomials	YY
12	Bessel functions	YY
13	Gaussian equation and solutions	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	Teaching some mathematical methods and their applications in physics
2	
3	
4	
5	

Course-Specific Explanations:

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



T.C.
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Course Syllabus Form

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