Code and Name: FİZ5590 INTRODUCTION TO PLASMA WAVES

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 Weekly Program:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

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: **Extraction of Wave Equations in Plasma media and Application to Some Media**

Material: **Plasma Physics Book**

Student Responsibility :

Weekly Lesson Plan

Week	Topic	Method
1	Maxwell's equations in plasma	YY
2	Isotropic plasma and Non -Isotropic plasma	YY
3	Magnetoplasm Propagation of electromagnetic waves in it and determination of boundary conditions	YY
4	Energy of electromagnetic waves in plasma	YY
5	Phase and group velocities of electromagnetic waves in plasma	YY
6	Waves generated in plasma Fashions Determination	YY
7	Reflection in plasma media	YY
8	Cold Plasma Waves	YY
9	Hot Plasma Waves	YY
10	Electron Wave	YY
11	Ion wave	YY
12	Applications	YY
13	Problem solutions	YY
14	What Have We Learned?	YY

Assessment and Evaluation

Method			Number	Weight
Break Exam	Exam	Face	1	% 50
	Quiz	-	-	
	Homework	-		
	Project	-	-	-
General Exam	Face		1	% 50

Course Outcomes:

1	Ability to deduce Wave Equations in any medium
2	Internalization of some concepts in equations
3	Comprehension of Phase and Group velocities
4	Reduction of wave equations depending on various conditions
5	

Course-Specific Explanations:

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