Code and Name:	**FİZ5410 LINEAR AND NON-LINEAR 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: **Derivation of Linear and Nonlinear Waves in Plasma Medium.**

Material: **Plasma Physics Book and lecture notes**

Student Responsibility :

Weekly Lesson Plan

Week	Topic	Method
1	Linear and Nonlinear plasma waves	YY
2	High and Low frequency approximations	YY
3	Ordinary, Extraordinary and Polarized waves in plasma	YY
4	Alfve n waves	YY
5	Electromagnetic Waves in Plasma Polarization	YY
6	Kinetic theory of plasma waves	YY
7	Low-frequency waves	YY
8	Analysis of low-frequency waves	YY
9	Sound waves	YY
10	Electron wave	YY
11	Ion wave	YY
12	Counterparts in the ionosphere	YY
13	Whistling waves	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	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