



Code and Name: FİZ5430 MAGNETOHYDRODYNAMIC

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 fluid equations for charged particles

Material: Plasma Physics and Lecture notes

Student Responsibility:

Weekly Lesson Plan	Week	Topic	Method
	1	Fluid approach to plasma	YY
	2	Equation of motion for charged particles in fluid approximation	YY
	3	Conductivity and current density	YY
	4	Solution of motion equations and wave equations together	YY
	5	Low-frequency waves	YY
	6	Phase and group velocities of low-frequency waves	YY
	7	Separation relations	YY
	8	Hydrodynamic approaches	YY
	9	Movement in a frozen magnetic field	YY
	10	MHD Approaches	YY
	11	Refractive index	YY
	12	Resonances, Interruptions	YY
	13	Numerical methods	YY
	14	Reviews 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 the application of the fluid model to the ionosphere
	2	
	3	
	4	
	5	

Course-Specific Explanations:

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



T.C.
FIRAT UNIVERSITY
Course Syllabus Form

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