



Code and Name: FİZ5360 MAGNETIC PROPERTIES OF SOLIDS

Unit: Graduate School of Natural and Applied Sciences

Detail: Period: 2023-2024 Status: Optional Class: 1 Credits: 2 2 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 4 It will be done on an hourly basis.

Place: YY: UE:

Purpose: Understanding how magnetic materials are classified and learning magnetic properties

Material: Physics of Magnetism and Magnetic Materials , K.H.J. Buschow , F.R. de Boer , Kluwer Academic / Plenum Publishers, 2004

Student Responsibility : Conducting preparation and research before and after the lecture.

Weekly Lesson Plan	Week	Topic		Method	
	1	Atomic moments and their source		YY	
	2	An overview of some basic formulas and units		YY	
	3	Magnetic susceptibility and Curie Act		YY	
	4	Classification of magnetic materials		YY	
	5	Ferromanyetizma , Antiferromanyetizma and Ferrimagnetism		YY	
	6	Paramanyetizma and Langevin diamanyetizması		YY	
	7	Ferromagnetism in Metals and Ferromagnetic Domains		YY	
	8	Some techniques used in determining magnetic properties		YY	
	9	MIDTERM EXAM		YY	
	10	Permanent magnetism and magnetic anisotropy		YY	
	11	Parameteric Resonance		YY	
	12	Ferromanyetic Resonance		YY	
	13	Nuclear Magnetic Resonance		YY	
	14	Soft magnetic materials		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 distinguish between magnetic and non-magnetic solids			
	2	To be able to determine the relationship between magnetic properties and structural properties of solid			
	3	Ability to explain changes in the behavior of magnetic solids depending on external magnetic field and temperature			
	4	Understanding the usage areas of magnetic solids depending on their magnetic properties			
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Course-Specific Explanations:

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



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Course Syllabus Form

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