



**Code and Name:** FİZ5790 HIGH TEMPERATURE SUPERCONDUCTIVITIES

**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: Face-to-face UE: -

**Purpose:** High Temperature Superconductivities

**Material:**

**Student Responsibility:**

#### Weekly Lesson Plan

Week	Topic	Method
1	High temperature Superconductors	YY
2	High temperature superconductor Material Preparation Techniques	YY
3	High-temperature superconductivities Crystal structures	YY
4	Methods of analysis of high-temperature superconductors	YY
5	High temperature superconductors Application Areas	YY
6	Transport of current in high-temperature superconductors	YY
7	Resistivity and magnetic sensibility	YY
8	Midterm Exam	YY
9	Uses of superconductors in technology	YY
10	High-temperature superconductors with granular structure	YY
11	Superconducting Hysteresis	YY
12	Critical current density in high-temperature superconductors	YY
13	Superconductivity parameters; Infiltration Depth ( $\lambda$ ), co-length ( $\xi$ ), Critical Current Density (J <sub>c</sub> )	YY
14	Superconductivity Meissner Event	YY

#### Assessment and Evaluation

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

#### Course Outcomes:

1	
2	
3	
4	
5	

#### Course-Specific Explanations:

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



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FIRAT UNIVERSITY  
**Course Syllabus Form**

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