



Code and Name: FİZ5300 ADVANCED THERMODYNAMICS

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:
Place:

YY: Faculty of Science, Department of Physics

EU:

Purpose: Student and , Thermodynamics hakkında genel kavramların ve termodinamiğin uygulama sahalarının kavratılması

Material: Sears and Zemansky ' s University Physics, H.D. Young, R.A. Freedman, Pearson-Addison Wesley, 2008

Student Responsibility
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Weekly Lesson Plan	Week	Topic		Method	
	1	Heat & Temperature		YY	
	2	Heat Transfer Mechanisms		YY	
	3	Calorimetry and Phase Transformations		YY	
	4	Thermal properties of the substance		YY	
	5	Ideal Gas and Its Properties		YY	
	6	Heat Capacity		YY	
	7	Thermal Equilibrium and the Zeroth Law of Thermodynamics		YY	
	8	MIDTERM EXAM		YY	
	9	I. Law of Thermodynamics		YY	
	10	Second Law of Thermodynamics		YY	
	11	III. Law of Thermodynamics		YY	
	12	Methods Used to Determine Thermal Properties (1. Part)		YY	
	13	Methods Used to Determine Thermal Properties (2. Part)		YY	
	14	Isothermal and Non-Isothermal Kinetics (General Information)		YY	
Assessment and Evaluation	Method			Number	Weight
	Break Exam	Exam	YY	1	% 50
		Quiz		-	
		Homework			
		Project		-	-
	General Exam	YY		1	% 50
Course Outcomes:	1	Thermodynamics Obtaining general information about the concept			
	2	Recognizing the unbreakable link between Thermodynamics and Physics			
	3	Application areas of thermodynamics and learn its importance in material characterization			
	4				
	5				

Course-Specific Explanations:

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