



Code and Name:

FİZ5190 APPLICATIONS OF THERMODYNAMICS IN PHYSICS

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

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Weekly

Program:

Rendering:

The course will be conducted face-to-face for 3 hours per week.

Place:

YY: Faculty of Science, Department of Physics

UE:

Purpose:

To provide graduate students with a fundamental background in thermodynamics.

Material:

The course will be taught using books and lecture notes.

Student

Responsibility

:

Weekly Lesson Plan

Week	Topic	Method
1	Course Introduction, Weekly Course Topics Overview, Course Objective	YY
2	Definition of Thermodynamic Concepts, Definition of Thermodynamic Properties	YY
3	Thermodynamic Systems, Mass and Energy Transfer	YY
4	Types of Energy and Application of Hall's Postulate	YY
5	Power (Electricity) Generation and Its Applications	YY
6	Heating, cooling and air conditioning	YY
7	Definition of Ideal Gas and Explanation of Its Mixtures	YY
8	Midterm Exam	YY
9	Gas and Vapor Mixtures	YY
10	Internal Combustion Engines, Work-Producing Cycles	YY
11	Heat System Designs	YY
12	Nuclear Power Plants	YY
13	Thermal and Chemical Equilibrium	YY
14	General Review and Learning Outcome Assessment	YY

Assessment and Evaluation

Method		Number	Weight
Break Exam	Exam	Face to Face	1
	Quiz	No.	-
	Homework	Activities will be given before and after the midterm exam.	2
	Project	No.	-
General Exam	Face to Face		1
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Course Outcomes:

1	General Review and Learning Outcome Assessment
2	To learn the formulas, equations and proofs related to the course content and the subject .
3	To learn the applicability of the achievements obtained in scientific studies .
4	Course Physics and other science dallarında uygulanabilirliği ve kullanılabilirliğini anlamak.
5	

Course-Specific Explanations:

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



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Course Syllabus Form

Document No	EGTM - 0001
Publication Date	13.09.2021
Revision Date	-
Revision No	0