



Code and Name:

FİZ5150 INTRODUCTION TO COMPUTER SIMULATIONS 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:

Face-to-face lessons per week 3 It will be done on an hourly basis.

Place:

YY: Department of Physics

UE:

-

Purpose:

Studying some theoretical subjects in the fields of science and engineering with computer simulations

Material:

Lecture notes

Student

Responsibility

The student has compulsory attendance..

Weekly Lesson Plan	Week	Topic	Method		
	1	Introduction to computer simulations	YY		
	2	The purpose of computer simulations and examples from around the world	YY		
	3	Phyton language and its basic structure	YY		
	4	Fortran programming language	YY		
	5	Fortran and Phyton languages and general characteristics	YY		
	6	Simulation in Physics, Chemistry and Engineering	YY		
	7	Simulation of small-scale molecules	YY		
	8	Simulations of large molecules	YY		
	9	Simulation mo Problems and Solution Techniques	YY		
	10	Simulation techniques with parallel programming	YY		
	11	Application-1	YY		
	12	Application-2	YY		
	13	Application-3	YY		
	14	Final Exam	YY		
Assessment and Evaluation	Method		umbe	Weight	
	Break Exam	Exam	Face to Face	1	% 50
		Quiz	-	-	
		Homework	-		
		Project	-	-	-
General Exam	Face to Face		1	% 50	
Course Outcomes:	1	General simulation techniques and methods			
	2	The student will gain independent thinking and programming			
	3	To be able to learn the modeling of molecules and to comment comfortably on their inner world			
	4				
	5				

Course-Specific Explanations:

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



T.C.
FIRAT UNIVERSITY
Course Syllabus Form

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