Course Information								
Course Code	**T**	**P**	**L**	**C**	**ECTS**	**Type** C/E	**Language** TR/ENG etc.	**Year/Semester**
FİZ4002	**4**	**0**	**0**	**4**	**5**	**C**	**TR**	**4/SPRING**
Course Name (Turkish**)**	**Klasik(Teorik) Mekanik**							
Course Name (English**)**	**Classic Mechanic**							

Unit/Program	Physics Department/Undergraduate Program
Course Prerequisite	No
Course Objectives	To teach students to comprehend the concepts of theoretical mechanics and problem solutions about the subject.
Course Outline	Newtonian mechanics, teaching the solution of Lagrangian and Hamiltonian equations of motion in accelerated and non-accelerated systems, giving examples from life
Textbook/ Material / Resources	Theoretical mechanics textbooks and lecture notes
Internship Status	No

Course Precedents

University Name	**Program Name**	**Course Name**	**T-P-L-C; AKTS**	**Type**
Ankara University	**Physics**	**Mechanical Theory**	**4-2-0-5; 9**	**C**

The instructor who proposed the course (Title, Name and Surname)	*Signature*
Instructors who can teach the course (Title, Name and Surname)	*Signature*

Academic justification for the opening of the course? (The effect of course outcomes on program outcomes, etc.)

ECTS update for FIZ402 course

Brief explanation of the course (theoretical lecture, applications, laboratory, studio, off-campus activity, using software, etc.)

It will be taught theoretically under the supervision of the relevant Faculty Members.

External Stakeholder Opinions About the Course (It is expected that the opinions to be obtained from the business world that will employ your graduates or from real or legal persons outside the University who have expertise on the subject of the course will be specified. Proof documents must be attached to this form.)

Stakeholder Name	**Opinion** (It should be given as a summary, it should not exceed two lines.)

Weekly Course Content Distribution		
Week	**Theory**	**Application/Laboratory**
1	Newton's Laws and Applications	
2	Two-body problem	
3	Point Objects	
4	Theory of gravity	
5	Motion in Accelerating Reference Systems	
6	Statics and Dynamics of Solid Strings	
7	Mechanical Analytics	
8	MIDTERM EXAM	
9	Lagrange Metodu	
10	Hamiltonian Method	
11	Canonical Conversions	
12	Hamiltonyen Jacobi Teoremi	
13	D'alembert's principle	
14	Again	
15	Final Exam	
16		

Assessment			
Evaluation Criteria	**Activity**	**Custom**	**Contribution to Success Grade (%)**
	Midterm Exams	1	40
	Quizzes		
	Assignments		
	Projects		
	Term Paper		
	Laboratory		
	Other		
	Final Exam	1	60
		Sum:	100
Remarks			

Content Design and Subject Weight (%)	Mathematics and Basic Sciences	80
	Engineering Sciences	20
	Social Sciences	
	Health Sciences	
	Educational Sciences	
	Culture and Art Sciences	
	Design Information	

Workload (ECTS) Calculation			
Events	**Number**	**Duration (Hours)**	**Total workload (Hours)**
Fieldwork			
Midterm Exam Application	1	2	2
Self-Study (including pre-class and exam preparation)	14	3	42
Make-up Exam	1	2	2
Experiment and Observation			
Class Participation (Theory)	14	4	56
Homework			
Final Exam Practice	1	2	2
Laboratory			
Article Review			
Writing an Article			
Reading			
Case Study			
Performance			
Problem Solution			
Project Preparation			
Project Submission			
Quiz			
Report Preparation			
Submitting Reports			
Role/Drama Work			
Seminar			
Oral Exam			
Team/Group Work			
Argument	7	3	21
Application/Practice			
Other			
TOTAL WORKLOAD:			**125**
ECTS CREDİTS OF THE COURSE: *(The number obtained as a result of Total Workload/25 is calculated by rounding to the whole number.)*			**5**

	Program Outcomes (PO) / **Learning Outcomes (LO)** *(Course Outcomes)*	1	2	3	4	5	6	7	8	9	10	11
1	Can carry out independent and collaborative studies on physics-related issues and use analytical thinking skills	**5**	**4**	**4**	**4**	**5**	**4**	**5**	**5**	**4**	**3**	**1**
2	Gain the knowledge and skills necessary to use experimental methods and data analysis techniques	**5**	**4**	**4**	**4**	**5**	**4**	**5**	**5**	**4**	**3**	**1**
3	Students have the ability to participate effectively in group work	**5**	**4**	**4**	**4**	**5**	**4**	**5**	**5**	**4**	**3**	**1**
4	Students gain the ability to take responsibility and have principles	**5**	**4**	**4**	**4**	**5**	**4**	**5**	**5**	**4**	**3**	**1**
5	Students' ability to make written and oral presentations improves	**5**	**4**	**4**	**4**	**5**	**4**	**5**	**5**	**4**	**3**	**1**

Organizer: Prof. Dr. Ali YEŞİL
Preparation Date: 20.05.2024