

Course Information								
Course Code	T	P	L	C	ECTS	Type C/E	Language TR/ENG etc.	Year/Semester
FİZ1102	4	2	0	5	8	C	TR	1/ SPRING
Course Name (Turkish)	Genel Fizik -II							
Course Name (English)	General Physics-II							

Unit/Program	Physics Department/Undergraduate Program
Course Prerequisite	No
Course Objectives	Teaching Students the Concepts of Electricity and Magnetism Physics
Course Outline	Physics of Electricity and Magnetism
Textbook/ Material / Resources	Physics for Science and Engineering II. (Serway Physics 2)
Internship Status	No

Course Precedents				
University Name	Program Name	Course Name	T-P-L-C; ECTS	Type
Gebze Technical University	Physics	Physics II	3-0-0-4-6	C
Osmangazi University	Physics	Physics II	4-2-0-5-7	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 FİZ102 course

Brief explanation of the course (theoretical lecture, applications, laboratory, studio, off-campus activity, using software, etc.)
It will be taught by the relevant Faculty Member in a face-to-face classroom environment.

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	Electric Charge and Coulomb's Law	
2	Electric Field	
3	Electric Flux and Gauss's Law	
4	Electrical Potential, Energy and Electrical Potential	
5	Electrical potential generated by continuous charge distribution	
6	Capacitance and Dielectrics	
7	Current and Resistance	
8	Direct Current Circuits, RC Circuits	
9	Midterm Exam	
10	Magnetic Fields	
11	Magnetic Field Sources	
12	Faraday's Law	
13	Inductance	
14	Alternating Current and Electromagnetic Waves	
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	50
	Engineering Sciences	50
	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	2	28
Make-up Exam	1	2	2
Experiment and Observation			
Class Participation (Theory)	14	6	84
Homework			
Final Exam Practice	1	2	2
Laboratory			
Article Review			
Writing an Article			
Reading			
Case Study			
Performance			
Problem Solution	14	2	28
Project Preparation			
Project Submission			
Quiz			
Report Preparation			
Submitting Reports			
Role/Drama Work			
Seminar			
Oral Exam			
Team/Group Work	14	4	56
Argument			
Application/Practice			
Other			
TOTAL WORKLOAD:			202
ECTS CREDITS OF THE COURSE: (The number obtained as a result of Total Workload/25 is calculated by rounding to the whole number.)			8

Program Outcomes (PO)		1	2	3	4	5	6	7	8	9	10	11
		1	2	3	4	5	6	7	8	9	10	11
1	To be able to explain the basic concepts of electricity and magnetism.	5	5	5	3	3	1	5	3	5	5	3
2	To be able to establish the relationship between electric charges and magnetic fields, to understand the physical events they cause.	5	5	5	5	2	1	5	3	5	4	5
3	To gain the ability to interpret, explain and relate events related to electricity and magnetism with mathematical solutions	5	5	5	4	5	1	5	5	5	3	4

Organizer: Prof. Dr. Fethi DAĞDELEN

Preparation Date: 20.05.2024