



Kafkas Üniversitesi
FACULTY OF SCIENCE AND LETTERS

Physics

Fizik

1.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204101	PHYSICS I	4+2+0	Compulsory	7
220204103	PHYSICS LAB. I	0+0+4	Compulsory	6
220204105	GENERAL CHEMISTRY I	4+0+0	Compulsory	5
220204107	ANALYSIS I	4+0+0	Compulsory	5
220204109	ANALYTICAL GEOMETRY	2+0+0	Compulsory	2
220204151	TURKISH LANGUAGE I	2+0+0	Compulsory	1
220204161	FOREIGN LANGUAGE(ENGLISH) I	2+0+0	Compulsory	1
220204171	ATATURK'S PRINCIPLES AND REVOLUTION HISTORY I	2+0+0	Compulsory	1
220204181	CAREER PLANNING	1+0+0	Compulsory	2
Total ECTS				30

2.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204102	GENERAL PHYSICS II	4+2+0	Compulsory	7
220204104	PHYSICS LAB. II	0+0+4	Compulsory	6
220204106	GENERAL CHEMISTRY II	4+0+0	Compulsory	4
220204108	ANALYSIS II	4+0+0	Compulsory	5
220204110	LINEAR ALGEBRA	2+0+0	Compulsory	2
220204112	BASIC COMPUTER	2+2+0	Compulsory	3
220204152	TURKISH LANGUAGE II	2+0+0	Compulsory	1
220204162	FOREIGN LANGUAGE(ENGLISH) II	2+0+0	Compulsory	1
220204172	ATATURK'S PRINCIPLES AND HISTORY OF REFORM I	2+0+0	Compulsory	1
Total ECTS				30

3.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204201	VIBRATION AND WAVES	4+0+0	Compulsory	6
220204203	CIRCUIT ANALYSIS	3+0+0	Compulsory	4
220204205	PHYSICS LAB. III	0+0+4	Compulsory	5
220204207	DIFFERENTIAL EQUATIONS I	4+0+0	Compulsory	5
220204209	MATHEMATICAL METHODS IN PHYSICS I	4+0+0	Compulsory	5
220204211	PROFESSIONAL ENGLISH I	2+0+0	Compulsory	2
220204021	2nd YEAR FALL ELECTIVE COURSES	-	Elective	3
Total ECTS				30

220204213	COMPUTER PROGRAMMING I	2+0+0	Elective	3
220204215	HISTORY OF SCIENCE	2+0+0	Elective	3
220204217	INTRODUCTION TO X-RAYS	2+0+0	Elective	3

4.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204202	MODERN PHYSICS	4+0+0	Compulsory	6
220204204	BASIC ELECTRONICS	3+0+0	Compulsory	4
220204206	PHYSICS LAB. IV	0+0+4	Compulsory	5
220204208	DIFFERENTIAL EQUATIONS II	4+0+0	Compulsory	5
220204210	MATHEMATICAL METHODS IN PHYSICS II	4+0+0	Compulsory	5
220204212	PROFESSIONAL ENGLISH II	2+0+0	Compulsory	2
220204022	2nd YEAR SPRING ELECTIVE COURSES	-	Elective	3
Total ECTS				30

220204214	COMPUTER PROGRAMMING II	2+0+0	Elective	3
220204216	OPTICAL	2+0+0	Elective	3
220204218	PHILOSOPHY OF SCIENCE	2+0+0	Elective	3

5.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204301	QUANTUM PHYSICS I	4+0+0	Compulsory	7
220204303	CLASSIC MECHANICS	4+0+0	Compulsory	7
220204305	HEAT AND THERMODYNAMICS	4+0+0	Compulsory	6

220204307	PHYSICS LAB. V	0+0+4	Compulsory	4
220204031	3rd YEAR FALL ELECTIVE COURSES	-	Elective	6
			Total ECTS	30
220204309	ELECTRONIC I	2+0+0	Elective	3
220204311	PROFESSIONAL ENGLISH III	2+0+0	Elective	3
220204313	FLUID MECHANICS	2+0+0	Elective	3
220204315	LINEAR OPTICS	2+0+0	Elective	3
220204317	INTRODUCTION TO FIELD THEORY	2+0+0	Elective	3
6.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204302	QUANTUM PHYSICS II	4+0+0	Compulsory	7
220204304	ELECTROMAGNETIC THEORY	4+0+0	Compulsory	7
220204306	STATISTICAL PHYSICS	4+0+0	Compulsory	6
220204308	PHYSICS LAB. VI	0+0+4	Compulsory	4
220204032	3rd YEAR SPRING ELECTIVE COURSES	-	Elective	6
			Total ECTS	30
220204310	ELECTRONICS II	2+0+0	Elective	3
220204312	PROFESSIONAL ENGLISH IV	2+0+0	Elective	3
220204314	INTRODUCTION TO LASER PHYSICS	2+0+0	Elective	3
220204316	FIBER OPTIC	2+0+0	Elective	3
220204318	COMPUTER APPLICATIONS IN PHYSICS	2+0+0	Elective	3
7.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204401	SOLID PHYSICS I	4+0+0	Compulsory	6
220204403	ATOM AND MOLECULAR PHYSICS	4+0+0	Compulsory	5
220204405	INTRODUCTION TO SPECTROSCOPY	3+0+0	Compulsory	3
220204407	RESEARCH PROJECT I	2+2+0	Compulsory	6
220204041	4nd YEAR FALL ELECTIVE COURSES	-	Elective	10
			Total ECTS	30
220204409	RESEARCH TECHNIQUES IN PHYSICS	3+0+0	Elective	5
220204411	RADIATION AND HEALTH PHYSICS	3+0+0	Elective	5
220204413	GRAVITATION AND COSMOLOGY	3+0+0	Elective	5
220204415	INTRODUCTION TO ASTROPHYSICS	3+0+0	Elective	5
220204417	INTRODUCTION TO ACCELERATOR PHYSICS	3+0+0	Elective	5
220204419	INTRODUCTION TO DETECTOR PHYSICS	3+0+0	Elective	5
8.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
220204402	SOLID PHYSICS II	4+0+0	Compulsory	6
220204404	NUCLEAR PHYSICS	4+0+0	Compulsory	5
220204406	PHYSICS LAB. VII	0+0+2	Compulsory	3
220204408	RESEARCH PROJECT II	2+2+0	Compulsory	6
220204042	4nd YEAR SPRING ELECTIVE COURSES	-	Elective	10
			Total ECTS	30
220204410	INTRODUCTION TO SEMICONDUCTOR PHYSICS	3+0+0	Elective	5
220204412	INTRODUCTION TO PARTICLE PHYSICS	3+0+0	Elective	5
220204414	INTRODUCTION TO SUPERCONDUCTIVITY	3+0+0	Elective	5
220204416	NEW DEVELOPMENTS IN PHYSICS	3+0+0	Elective	5
220204418	INTRODUCTION TO PLASMA PHYSICS	3+0+0	Elective	5
220204420	NEUTRON AND REACTOR PHYSICS	3+0+0	Elective	5