



Alanya Alaaddin Keykubat Üniversitesi

RAFET KAYIŞ MÜHENDİSLİK FAKÜLTESİ

GENETİK VE BİYOMÜHENDİSLİK BÖLÜMÜ

GENETİK VE BİYOMÜHENDİSLİK (İNG.)

1.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
ATA 101	TURKISH HISTORY I	2+0+0	Zorunlu	2
GBE 101	MATHEMATICS I	4+0+0	Zorunlu	5
GBE 103	PHYSICS I	3+0+1	Zorunlu	5
GBE 105	BIOLOGY	3+0+0	Zorunlu	5
GBE 107	GBE LAB I	0+0+2	Zorunlu	2
GBE 109	ENGINEERING ETHICS	2+0+0	Zorunlu	2
GBE 111	CHEMISTRY	3+0+0	Zorunlu	4
GBE 113	CHEMISTRY LAB	0+0+2	Zorunlu	1
GBE 115	INTRODUCTION TO COMPUTER AND INFORMATION SYSTEMS	1+1+0	Zorunlu	2
TDB 101	TURKISH LANGUAGE I	2+0+0	Zorunlu	2
Toplam AKTS				30

2.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
ATA 102	TURKISH HISTORY II	2+0+0	Zorunlu	2
GBE 102	MATHEMATICS II	4+0+0	Zorunlu	5
GBE 104	PHYSICS II	3+0+1	Zorunlu	5
GBE 106	MICROBIOLOGY	3+0+0	Zorunlu	5
GBE 108	GBE LAB II	0+0+2	Zorunlu	2
GBE 110	INTRODUCTION TO GENETICS AND BIOENGINEERING	2+0+0	Zorunlu	4
GBE 112	ORGANIC CHEMISTRY	3+0+0	Zorunlu	5
TDB 102	TURKISH LANGUAGE II	2+0+0	Zorunlu	2
Toplam AKTS				30

3.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
GBE 201	DIFFERENTIAL EQUATIONS	4+0+0	Zorunlu	5
GBE 203	GENETICS	3+0+0	Zorunlu	5
GBE 205	CELL BIOLOGY	3+0+0	Zorunlu	5
GBE 207	THERMODYNAMICS	3+0+0	Zorunlu	5
GBE 209	BIOCHEMISTRY	3+0+0	Zorunlu	4
GBE 211	GBE LAB III	0+0+4	Zorunlu	3
SEC 201	ELECTIVE COURSE I	3+0+0	Seçmeli	3
Toplam AKTS				30
Gruplu Dersler				
SEC 201.1	REPORT WRITING AND PRESENTATION	3+0+0	Seçmeli	3
SEC 201.2	TECHNOLOGY AND R&D	3+0+0	Seçmeli	3
SEC 201.3	BUSINESS PLANNING	3+0+0	Seçmeli	3

4.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
GBE 202	STATISTICS AND PROBABILITY	2+2+0	Zorunlu	5
GBE 204	MOLECULAR BIOLOGY	3+0+0	Zorunlu	5
GBE 206	PHYSIOLOGY	3+0+0	Zorunlu	5
GBE 208	HEAT AND MASS TRANSFER	3+0+0	Zorunlu	5
GBE 210	SCIENTIFIC PROGRAMMING	2+2+0	Zorunlu	4
GBE 212	GBE LAB IV	0+0+4	Zorunlu	3
SEC 202	ELECTIVE COURSE II	3+0+0	Seçmeli	3
Toplam AKTS				30
Gruplu Dersler				
SEC 202.1	SCIENTIFIC RESEARCH METHODS	3+0+0	Seçmeli	3
SEC 202.2	ENTREPRENEURSHIP	3+0+0	Seçmeli	3
SEC 202.3	CAREER PLANNING	3+0+0	Seçmeli	3
SEC 202.4	BIOMEDICAL PRODUCT REGULATIONS	3+0+0	Seçmeli	3

5.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
GBE 301	GENETIC ENGINEERING	3+0+0	Zorunlu	5
GBE 303	BIOPROCESS ENGINEERING I	3+0+0	Zorunlu	5

GBE 305	BIOMATERIALS	3+0+0	Zorunlu	5
GBE 307	GBE LAB V	0+0+4	Zorunlu	3
SEC 301	ELECTIVE COURSE III	3+0+0	Seçmeli	10
SEC 303	ELECTIVE COURSE IV	2+0+0	Seçmeli	2
Toplam AKTS				30
Gruplu Dersler				
SEC 301.1	BIOLOGY OF AGING	3+0+0	Seçmeli	5
SEC 301.10	PROKARYOTIC MOLECULAR GENETICS	3+0+0	Seçmeli	5
SEC 301.11	VIRUS BIOLOGY	3+0+0	Seçmeli	5
SEC 301.12	GENOMICS	3+0+0	Seçmeli	5
SEC 301.13	IMAGING TECHNOLOGIES IN BIOLOGY	3+0+0	Seçmeli	5
SEC 301.14	HUMAN GENETICS	3+0+0	Seçmeli	5
SEC 301.15	SECONDARY METABOLITES	3+0+0	Seçmeli	5
SEC 301.2	CANCER BIOLOGY	3+0+0	Seçmeli	5
SEC 301.3	CHROMOSOME BIOLOGY	3+0+0	Seçmeli	5
SEC 301.4	CYTOGENETICS	3+0+0	Seçmeli	5
SEC 301.5	EPIGENETICS	3+0+0	Seçmeli	5
SEC 301.6	FLUID MECHANICS	3+0+0	Seçmeli	5
SEC 301.7	FUNCTIONAL FOODS	3+0+0	Seçmeli	5
SEC 301.8	NEUROQUANTOLOGY	3+0+0	Seçmeli	5
SEC 301.9	PLANT BIOLOGY AND GENETICS	3+0+0	Seçmeli	5
SEC 303.1	WESTERN CIVILIZATION HISTORY 1	2+0+0	Seçmeli	2
SEC 303.10	VOLLEYBALL	2+0+0	Seçmeli	2
SEC 303.11	BASKETBALL	2+0+0	Seçmeli	2
SEC 303.12	TENNIS	2+0+0	Seçmeli	2
SEC 303.13	TABLE TENNIS	2+0+0	Seçmeli	2
SEC 303.14	FOLK DANCES	2+0+0	Seçmeli	2
SEC 303.15	MUSIC CULTURE	2+0+0	Seçmeli	2
SEC 303.16	ARTS&PAINTING	2+0+0	Seçmeli	2
SEC 303.17	THEATRE AND CINEMA	2+0+0	Seçmeli	2
SEC 303.18	HEALTHY LIVING	2+0+0	Seçmeli	2
SEC 303.19	NUTRITION	2+0+0	Seçmeli	2
SEC 303.2	HISTORY OF ART	2+0+0	Seçmeli	2
SEC 303.20	MEDIA LITERACY	2+0+0	Seçmeli	2
SEC 303.21	MATHEMATICAL ESTHETICS	2+0+0	Seçmeli	2
SEC 303.22	INDUSTRIAL DESIGN	2+0+0	Seçmeli	2
SEC 303.23	BASIC PHOTOGRAPHY	2+0+0	Seçmeli	2
SEC 303.24	SURFING	2+0+0	Seçmeli	2
SEC 303.25	JAPANESE I	2+0+0	Seçmeli	2
SEC 303.26	JAPANESE II	2+0+0	Seçmeli	2
SEC 303.27	MYTHOLOGY	2+0+0	Seçmeli	2
SEC 303.28	ANCIENT CITY	2+0+0	Seçmeli	2
SEC 303.29	SOCIOLOGY	2+0+0	Seçmeli	2
SEC 303.3	HISTORY AND PHILOSOPHY OF SCIENCE	2+0+0	Seçmeli	2
SEC 303.30	PHILOSOPHY	2+0+0	Seçmeli	2
SEC 303.31	ANCIENT DNA: HISTORY OF THE PAST	2+0+0	Seçmeli	2
SEC 303.32	GENETIC HERITAGE	2+0+0	Seçmeli	2
SEC 303.33	MODERN GENETIC APPLICATIONS: GENE CLONING	2+0+0	Seçmeli	2
SEC 303.34	FOOD AND FOOD CULTURE	2+0+0	Seçmeli	2
SEC 303.35	DIET AND EFFECTS	2+0+0	Seçmeli	2
SEC 303.36	TRADITIONAL FOODS	2+0+0	Seçmeli	2
SEC 303.37	ORGANIC AGRICULTURE	2+0+0	Seçmeli	2
SEC 303.38	HUMAN RIGHTS	2+0+0	Seçmeli	2
SEC 303.39	VOLUNTEERING STUDIES	2+0+0	Seçmeli	2
SEC 303.4	DISASTER AWARENESS	2+0+0	Seçmeli	2
SEC 303.40	DEFENCE INDUSTRY 102	2+0+0	Seçmeli	2
SEC 303.41	DEFENCE INDUSTRY 402	2+0+0	Seçmeli	2
SEC 303.42	ETHICS	2+0+0	Seçmeli	2
SEC 303.43	FIGHTING ADDICTION	2+0+0	Seçmeli	2
SEC 303.5	ELOQUENT SPEECH	2+0+0	Seçmeli	2
SEC 303.6	BASIC FIRST AID AND EMERGENCY	2+0+0	Seçmeli	2
SEC 303.7	ARCHERY	2+0+0	Seçmeli	2
SEC 303.8	BOXING, KARATE AND TAEKWONDO	2+0+0	Seçmeli	2
SEC 303.9	FOOTBALL	2+0+0	Seçmeli	2
6.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
GBE 302	BIOINFORMATICS	2+2+0	Zorunlu	5
GBE 304	BIOPROCESS ENGINEERING II	3+0+0	Zorunlu	5

GBE 306	GBE LAB VI	0+0+4	Zorunlu	5
GBE 308	INTERNSHIP	0+0+0	Zorunlu	5
SEC 302	ELECTIVE COURSE V	3+0+0	Seçmeli	10
SEC 304	ELECTIVE COURSE VI	2+0+0	Seçmeli	2
Toplam AKTS				32
Gruplu Dersler				
SEC 302.01	BIOLOGY OF STRESS	3+0+0	Seçmeli	5
SEC 302.02	BIOMATERIALS CHARACTERIZATION	3+0+0	Seçmeli	5
SEC 302.03	BIOMECHANICS	3+0+0	Seçmeli	5
SEC 302.04	BIOTECHNOLOGY	3+0+0	Seçmeli	5
SEC 302.05	BIOTRANSPORT PHENOMENA	3+0+0	Seçmeli	5
SEC 302.06	DEVELOPMENTAL BIOLOGY	3+0+0	Seçmeli	5
SEC 302.07	EUKARYOTIC MOLECULAR GENETICS	3+0+0	Seçmeli	5
SEC 302.08	FORENSIC GENETICS	3+0+0	Seçmeli	5
SEC 302.09	IMMUNOLOGY	3+0+0	Seçmeli	5
SEC 302.10	MICROSCOPY	3+0+0	Seçmeli	5
SEC 302.11	MOLECULAR CELL BIOLOGY	3+0+0	Seçmeli	5
SEC 302.12	NEUROSCIENCE	3+0+0	Seçmeli	5
SEC 302.13	NEUROTOXICOLOGY	3+0+0	Seçmeli	5
SEC 302.14	NUTRACEUTICALS	3+0+0	Seçmeli	5
SEC 302.15	NUTRITION IN HEALTH AND DISEASE	3+0+0	Seçmeli	5
SEC 302.16	PROTEOMICS AND METABOLOMICS	3+0+0	Seçmeli	5
SEC 302.17	TOXICOLOGY	3+0+0	Seçmeli	5
SEC 304.1	WESTERN CIVILIZATION HISTORY 2	2+0+0	Seçmeli	2
SEC 304.10	VOLLEYBALL	2+0+0	Seçmeli	2
SEC 304.11	BASKETBALL	2+0+0	Seçmeli	2
SEC 304.12	TENNIS	2+0+0	Seçmeli	2
SEC 304.13	TABLE TENNIS	2+0+0	Seçmeli	2
SEC 304.14	FOLK DANCES	2+0+0	Seçmeli	2
SEC 304.15	MUSIC CULTURE	2+0+0	Seçmeli	2
SEC 304.16	ARTS&PAINTING	2+0+0	Seçmeli	2
SEC 304.17	THEATRE AND CINEMA	2+0+0	Seçmeli	2
SEC 304.18	HEALTHY LIVING	2+0+0	Seçmeli	2
SEC 304.19	NUTRITION	2+0+0	Seçmeli	2
SEC 304.2	HISTORY OF ART	2+0+0	Seçmeli	2
SEC 304.20	MEDIA LITERACY	2+0+0	Seçmeli	2
SEC 304.21	MATHEMATICAL ESTHETICS	2+0+0	Seçmeli	2
SEC 304.22	INDUSTRIAL DESIGN	2+0+0	Seçmeli	2
SEC 304.23	BASIC PHOTOGRAPHY	2+0+0	Seçmeli	2
SEC 304.24	SURFING	2+0+0	Seçmeli	2
SEC 304.25	JAPANESE I	2+0+0	Seçmeli	2
SEC 304.26	JAPANESE II	2+0+0	Seçmeli	2
SEC 304.27	MYTHOLOGY	2+0+0	Seçmeli	2
SEC 304.28	ANCIENT CITY	2+0+0	Seçmeli	2
SEC 304.29	SOCIOLOGY	2+0+0	Seçmeli	2
SEC 304.3	HISTORY AND PHILOSOPHY OF SCIENCE	2+0+0	Seçmeli	2
SEC 304.30	PHILOSOPHY	2+0+0	Seçmeli	2
SEC 304.31	ANCIENT DNA: HISTORY OF THE PAST	2+0+0	Seçmeli	2
SEC 304.32	GENETIC HERITAGE	2+0+0	Seçmeli	2
SEC 304.33	MODERN GENETIC APPLICATIONS: GENE CLONING	2+0+0	Seçmeli	2
SEC 304.34	FOOD AND FOOD CULTURE	2+0+0	Seçmeli	2
SEC 304.35	DIET AND EFFECTS	2+0+0	Seçmeli	2
SEC 304.36	TRADITIONAL FOODS	2+0+0	Seçmeli	2
SEC 304.37	ORGANIC AGRICULTURE	2+0+0	Seçmeli	2
SEC 304.38	HUMAN RIGHTS	2+0+0	Seçmeli	2
SEC 304.39	VOLUNTEERING STUDIES	2+0+0	Seçmeli	2
SEC 304.4	DISASTER AWARENESS	2+0+0	Seçmeli	2
SEC 304.40	DEFENCE INDUSTRY 102	2+0+0	Seçmeli	2
SEC 304.41	DEFENCE INDUSTRY 402	2+0+0	Seçmeli	2
SEC 304.42	ETHICS	2+0+0	Seçmeli	2
SEC 304.43	FIGHTING ADDICTION	2+0+0	Seçmeli	2
SEC 304.5	ELOQUENT SPEECH	2+0+0	Seçmeli	2
SEC 304.6	BASIC FIRST AID AND EMERGENCY	2+0+0	Seçmeli	2
SEC 304.7	ARCHERY	2+0+0	Seçmeli	2
SEC 304.8	BOXING, KARATE AND TAEKWONDO	2+0+0	Seçmeli	2
SEC 304.9	FOOTBALL	2+0+0	Seçmeli	2

7.Yarıyıl Ders Planı

Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
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GBE 401	GRADUATION PROJECT I	0+2+0	Zorunlu	5
GBE 403	GENETICS AND BIOENGINEERING DESIGN	3+0+0	Zorunlu	5
GBE 405	ECONOMICS	3+0+0	Zorunlu	3
ISG 401	OCCUPATION H&S I	2+0+0	Zorunlu	2
SEC 401	ELECTIVE COURSE VII	3+0+0	Seçmeli	15
Toplam AKTS				30
Gruplu Dersler				
SEC 401.1	BIOMEDICAL MATERIALS ENGINEERING	3+0+0	Seçmeli	5
SEC 401.10	MACROMOLECULAR DYNAMICS	3+0+0	Seçmeli	5
SEC 401.11	MOLECULAR EVOLUTION	3+0+0	Seçmeli	5
SEC 401.12	MOLECULAR MEDICINE	3+0+0	Seçmeli	5
SEC 401.13	MOLECULAR NEUROSCIENCE	3+0+0	Seçmeli	5
SEC 401.14	NANOTECHNOLOGY	3+0+0	Seçmeli	5
SEC 401.15	PHARMACOGENETICS	3+0+0	Seçmeli	5
SEC 401.16	POPULATION GENETICS	3+0+0	Seçmeli	5
SEC 401.2	CELL CULTURE TECHNIQUES	3+0+0	Seçmeli	5
SEC 401.3	CHARACTERIZATION OF NANOMATERIALS	3+0+0	Seçmeli	5
SEC 401.4	CLINICAL BIOCHEMISTRY	3+0+0	Seçmeli	5
SEC 401.5	DRUG DELIVERY SYSTEMS	3+0+0	Seçmeli	5
SEC 401.6	ENZYME KINETICS AND TECHNOLOGIES	3+0+0	Seçmeli	5
SEC 401.7	EPIDEMIOLOGY	3+0+0	Seçmeli	5
SEC 401.8	INDUSTRIAL BIOTECHNOLOGY	3+0+0	Seçmeli	5
SEC 401.9	INSTRUMENTAL ANALYSIS	3+0+0	Seçmeli	5
8.Yarıyıl Ders Planı				
Ders Kodu	Ders Adı	T+U+L	Zorunlu/Seçmeli	AKTS
GBE 402	GRADUATION PROJECT II	0+6+0	Zorunlu	8
GBE 404	CURRENT TOPICS IN GBM	2+2+0	Zorunlu	5
ISG 402	OCCUPATION H&S II	1+0+0	Zorunlu	2
SEC 402	ELECTIVE COURSE VIII	3+0+0	Seçmeli	15
Toplam AKTS				30
Gruplu Dersler				
SEC 402.1	MOLECULAR SIGNALLING PATHWAYS AND CANCER	3+0+0	Seçmeli	5
SEC 402.10	STEM CELLS	3+0+0	Seçmeli	5
SEC 402.11	PLANT TISSUE CULTURE	3+0+0	Seçmeli	5
SEC 402.12	PHARMACEUTICAL BIOTECHNOLOGY	3+0+0	Seçmeli	5
SEC 402.13	TISSUE ENGINEERING	3+0+0	Seçmeli	5
SEC 402.14	NEUROGENETICS	3+0+0	Seçmeli	5
SEC 402.15	PROTEIN ENGINEERING	3+0+0	Seçmeli	5
SEC 402.2	MITOCHONDRIAL BIOLOGY	3+0+0	Seçmeli	5
SEC 402.3	MOLECULAR ANTHROPOLOGY	3+0+0	Seçmeli	5
SEC 402.4	MEDICAL BIOCHEMISTRY	3+0+0	Seçmeli	5
SEC 402.5	IMMUNOGENETICS	3+0+0	Seçmeli	5
SEC 402.6	NEURODEGENERATIVE DISEASES	3+0+0	Seçmeli	5
SEC 402.7	BIOSENSORS	3+0+0	Seçmeli	5
SEC 402.8	GENE THERAPY	3+0+0	Seçmeli	5
SEC 402.9	MOLECULAR PHARMACOLOGY	3+0+0	Seçmeli	5