

ULUDAG UNIVERSITY														
2018-2019 ACADEMIC YEAR														
DEPARTMENT OF MATHEMATICS DOUBLE MAJOR CURRICULUM														
FACULTY/VOCATIONAL SCHOOL: FACULTY OF ARTS AND SCIENCES														
DEPARTMENT/PROGRAM: BIOLOGY														
I.TERM/FALL						II.TERM SPRING								
CODE	COURSE						CODE	COURSE						
	Obligatory Courses					T A L Cred. ECTS		Obligatory Courses					T A L Cred. ECTS	
AIT101	ATATÜRK'S PRINCIPLES and REVOLUTION HISTORY I					2 0 0 2 2	AIT102	ATATÜRK'S PRINCIPLES and REVOLUTION HISTORY II					2 0 0 2 2	
TUD101	TURKISH LANGUAGE I					2 0 0 2 2	TUD102	TURKISH LANGUAGE II					2 0 0 2 2	
YAD101	FOREIGN LANGUAGE (ENGLISH)* I					2 0 0 2 2	YAD102	FOREIGN LANGUAGE (ENGLISH)* II					2 0 0 2 2	
YAD111	FOREIGN LANGUAGE (GERMAN)* I					2 0 0 2 2	YAD112	FOREIGN LANGUAGE (GERMAN)* II					2 0 0 2 2	
YAD121	FOREIGN LANGUAGE (FRENCH)* I					2 0 0 2 2	YAD122	FOREIGN LANGUAGE (FRENCH)* II					2 0 0 2 2	
BYL1001	GENERAL BIOLOGY I					2 0 0 2 4	BYL1002	GENERAL BIOLOGY II					2 0 0 2 5	
BYL1051	GENERAL BIOLOGY I LABORATORY					0 0 2 1 2	BYL1052	GENERAL BIOLOGY II LABORATORY					0 0 2 1 2	
MAT1095	MATHEMATICS					2 0 0 2 5	BYL1008	OCCUPATIONAL SAFETY					2 0 0 2 3	
KIM1031	GENERAL CHEMISTRY I					2 0 0 2 5	FZK1076	PHYSICS					2 0 0 2 5	
KIM1061	GENERAL CHEMISTRY I LABORATORY					0 0 2 1 2	FZK1078	PHYSICS LABORATORY					0 0 2 1 2	
BYL1041	COMPUTER APPLICATIONS IN BIOLOGY					2 2 0 3 6	KIM1032	GENERAL CHEMISTRY II					2 0 0 2 5	
							KIM1062	GENERAL CHEMISTRY II LABORATORY					0 0 2 1 2	
Total						17	Total						17	30
III.TERM/FALL						IV.TERM SPRING								
CODE	COURSE					T A L Cred. ECTS	CODE	COURSE					T A L Cred. ECTS	
	Obligatory Courses							Obligatory Courses						
BYL2001	CYTOLOGY					2 0 0 2 4	BYL2002	HISTOLOGY					2 0 0 2 4	
BYL2051	CYTOLOGY LABORATORY					0 0 2 1 2	BYL2052	HISTOLOGY LABORATORY					0 0 2 1 2	
BYL2003	GENERAL MICROBIOLOGY					2 0 0 2 4	BYL2004	MOLECULAR BIOLOGY					3 0 0 3 5	
BYL2053	GENERAL MICROBIOLOGY LABORATORY					0 0 2 1 2	BYL2010	ECOLOGY					3 0 0 3 5	
BYL2005	PLANT MORPHOLOGY and ANATOMY					2 0 0 2 4	BYL2012	MORPHOLOGY and TAXONOMY OF VERTEBRATES					2 0 0 2 4	
BYL2055	PLANT MORPHOLOGY and ANATOMY LABORATORY					0 0 2 1 2	BYL2062	MORPHOLOGY and TAXONOMY OF VERTEBRATES LABORATORY					0 0 2 1 2	
BYL2007	MORPHOLOGY and SYSTEMATICS OF THE INVERTEBRATE ANIMALS					2 0 0 2 4	BYL2014	VOCATIONAL FOREIGN LANGUAGE					2 0 0 2 4	
BYL2057	MORPHOLOGY and SYSTEMATICS OF THE INVERTEBRATE ANIMALS LABORATORY					0 0 2 1 2	KIM2436	ORGANIC CHEMISTRY					2 0 0 2 4	
BYL2009	ANIMAL ANATOMY					2 0 0 2 4								
BYL2059	ANIMAL ANATOMY LABORATORY					0 0 2 1 2								
Total						15	Total						16	30
V.TERM/FALL						VI.TERM SPRING								
CODE	COURSE					T A L Cred. ECTS	CODE	COURSE					T A L Cred. ECTS	
	Obligatory Courses							Obligatory Courses						
BYL3001	GENETICS I					2 0 0 2 4	BYL3002	GENETICS II					2 0 0 2 3	
BYL3051	GENETICS I LABORATORY					0 0 2 1 2	BYL3052	GENETICS II LABORATORY					0 0 2 1 2	
BYL3003	PLANT PHYSIOLOGY					2 0 0 2 4	BYL3004	ANIMAL PHYSIOLOGY					2 0 0 2 4	
BYL3053	PLANT PHYSIOLOGY LABORATORY					0 0 2 1 2	BYL3054	ANIMAL PHYSIOLOGY LABORATORY					0 0 2 1 2	
BYL3005	BIOCHEMISTRY I					2 0 0 2 4	BYL3006	BIOCHEMISTRY II					2 0 0 2 3	
BYL3055	BIOCHEMISTRY I LABORATORY					0 0 2 1 2	BYL3056	BIOCHEMISTRY II LABORATORY					0 0 2 1 2	
BYL3007	CLASSIFICATION OF NONE FLOWERING PLANTS					2 0 0 2 4	BYL3008	LIMNOLOGY					2 0 0 2 3	
BYL3057	CLASSIFICATION OF NONE FLOWERING PLANTS LABORATORY					0 0 2 1 2	BYL3058	LIMNOLOGY LABORATORY					0 0 2 1 2	
BYL3009	SCIENCE ETHICS					2 0 0 2 3	BYL3010	CLASSIFICATION OF FLOWERING PLANTS					2 0 0 2 4	
							BYL3060	CLASSIFICATION OF FLOWERING PLANTS LABORATORY					0 0 2 1 2	
	ELECTIVE COURSES							ELECTIVE COURSES						
	NON-FIELD COURSES					2 0 0 2 3		NON-FIELD COURSES					2 0 0 2 3	
Total						16	Total						17	30
VII.TERM/FALL						VIII.TERM SPRING								
CODE	COURSE					T A L Cred. ECTS	CODE	COURSE					T A L Cred. ECTS	
	Obligatory Courses							Obligatory Courses						
BYL4123	FINAL PROJECT I					0 2 0 1 2	BYL4124	FINAL PROJECT II					0 2 0 1 3	
BYL4125	ENTREPRENEURSHIP in BIOLOGY					1 0 0 1 1								
	ELECTIVE COURSES							ELECTIVE COURSES						
	FIELD COURSES							FIELD COURSES						
	ELECTIVE COURSES 1							ELECTIVE COURSES 1						
	ELECTIVE COURSES 2							ELECTIVE COURSES 2						
	ELECTIVE COURSES 3							ELECTIVE COURSES 3						
	ELECTIVE COURSES 4							ELECTIVE COURSES 4						
	ELECTIVE COURSES 5							ELECTIVE COURSES 5						
	ELECTIVE COURSES 6							ELECTIVE COURSES 6						
	NON-FIELD COURSES					2 0 0 2 3		NON-FIELD COURSES					2 0 0 2 3	
TOTAL						30	TOTAL						30	
	Elective Courses							Elective Courses						
BYL4013	HUMAN BIOLOGY					2 0 0 2 4	BYL4002	EVOLUTION					2 0 0 2 4	
BYL4015	ETOLOGY					2 0 0 2 4	BYL4004	DEVELOPMENTAL BIOLOGY					2 0 0 2 4	
BYL4019	CELL PHYSIOLOGY					2 0 0 2 4	BYL4010	PLANT BIOTECHNOLOGY					2 0 0 2 4	
BYL4021	ECONOMICAL BOTANY					2 0 0 2 4	BYL4012	PLANT EMBRIOLOGY					2 0 0 2 4	
BYL4033	ICHTHYOLOGY					1 0 2 2 4	BYL4014	GENETIC ENGINEERING					2 0 0 2 4	
BYL4035	MARINE BIOLOGY					2 0 0 2 4	BYL4018	PLANT METABOLITES					2 0 0 2 4	
BYL4037	ORNITHOLOGY					2 0 0 2 4	BYL4020	ENDOCRINOLOGY					2 0 0 2 4	
BYL4039	ENVIRONMENTAL BIOLOGY					2 0 0 2 4	BYL4022	HUMAN GENETICS					2 0 0 2 4	
BYL4045	ENVIRONMENTAL MICROBIOLOGY					2 0 0 2 4	BYL4024	VEGETATION					1 2 0 2 4	
BYL4059	PLANT DEVELOPMENT PHYSIOLOGY					1 0 2 2 4	BYL4026	CONSERVATION NATURE AND BIOLOGY					2 0 0 2 4	
BYL4061	PREPARATION TECHNIQUES					1 0 2 2 4	BYL4028	PLANT GEOGRAPHY					2 0 0 2 4	
BYL4063	CYTOGENETICS					1 0 2 2 4	BYL4032	PLANT ECOLOGY					2 0 0 2 4	
BYL4065	PARASITOLOGY					1 0 2 2 4	BYL4034	ANIMAL ECOLOGY					2 0 0 2 4	
BYL4071	HERPETOLOGY					2 0 0 2 4	BYL4038	WILD LIFE, ANIMAL DIVERSITY					2 0 0 2 4	
BYL4083	SOIL - PLANT INTERACTIONS					1 0 2 2 4	BYL4040	HERBARIUM TECHNIQUES					2 0 0 2 4	
BYL4085	PALYNOLOGY					2 0 0 2 4	BYL4046	ENTOMOLOGY					2 0 0 2 4	
BYL4087	ENZYME TECHNOLOGY					2 0 0 2 4	BYL4050	APPLIED BIOCHEMISTRY					2 0 0 2 4	
BYL4089	BACTERIAL PHYSIOLOGY					2 0 0 2 4	BYL4052	BIOLOGY OF ALGAE					2 0 2 2 4	
BYL4097	FORENSIC GENETICS					2 0 0 2 4	BYL4054	BIOCLIMATE					2 0 0 2 4	
BYL4099	RADIOBIOLOGY					2 0 0 2 4	BYL4060	PLANT DISEASES					2 0 0 2 4	
BYL4101	COMPUTATIONAL MOLECULAR BIOLOGY					1 2 0 2 4	BYL4088	INDUSTRIAL MICROBIOLOGY					1 2 0 2 4	
BYL4103	FREE RADICALS AND ANTIOXIDANT BIOLOGY					2 0 0 2 4	BYL4090	GENERAL CELL BIOLOGY					2 0 0 2 4	
BYL4105	DATA ANALYSIS IN BIOLOGICAL RESEARCHERS					1 2 0 2 4	BYL4100	INTRODUCTION TO BIOINFORMATICS					2 0 0 2 4	
BYL4109	FOOD MICROBIOLOGY					2 0 0 2 4	BYL4102	STRESS PHYSIOLOGY OF PLANTS					2 0 0 2 4	
BYL4111	FRESHWATER ECOLOGY					2 0 0 2 4	BYL4104	APPLIED GENETICS					2 0 0 2 4	
BYL4113	NANOTECHNOLOGY IN BIOLOGY					2 0 0 2 4	BYL4110	MYCOLOGY					2 0 0 2 4	
BYL4115	SYSTEMIC HISTOLOGY					2 0 0 2 4	BYL4112	FRESHWATER BENTHIC MACROINVERTEBRATES AND THEIR ECOLOGY					2 0 0 2 4	
BYL4117	PLANCTOLOGY					2 0 0 2 4	BYL4114	AEROBIOLOGY					1 0 2 2 4	
BYL4119	CANCER CELL BIOCHEMISTRY					2 0 0 2 4	BYL4116	DENDROLOGY					2 0 0 2 4	
BYL4121	PLANT PROTECTION BIOLOGY					2 0 0 2 4	BYL4118	LICHEN BIOLOGY					2 0 0 2 4	
							BYL4120	WATER POLLUTION AND ENVIRONMENTAL EFFECTS					2 0 0 2 4	
							BYL4122	BIOTECHNOLOGY					2 0 0 2 4	
							BYL4126	STANDARD FIRST AID TRAINING					1 2 0 2 4	

EXEMPT COURSES						
CODE	OBLIGATORY COURSES	T	A	L	Cred.	ECTS
AIT101	ATATÜRK'S PRINCIPLES AND REVOLUTION HISTORY I	2	0	0	2	2
TUD101	TURKISH LANGUAGE I	2	0	0	2	2
YAD101	FOREIGN LANGUAGE (ENGLISH)* I	2	0	0	2	2
AIT102	AIT102 ATATÜRK'S PRINCIPLES AND REVOLUTION HISTORY II	2	0	0	2	2
TUD102	TURKISH LANGUAGE II	2	0	0	2	2
YAD102	FOREIGN LANGUAGE (ENGLISH)* II	2	0	0	2	2
MAT1095	MATHEMATICS	2	0	0	2	5
BYL1041	COMPUTER APPLICATIONS IN BIOLOGY	2	2	0	3	6
BYL1008	OCCUPATIONAL SAFETY	2	0	0	2	3
FZK1076	PHYSICS	2	0	0	2	5
FZK1078	PHYSICS LABORATORY	0	0	2	1	2
	ELECTIVE COURSES					
BYL4105	DATA ANALYSIS IN BIOLOGICAL RESEARCHERS	1	2	0	2	4
					TOTAL	33
					TOTAL	4
	NON-FIELD COURSES	2	0	0	2	3
	NON-FIELD COURSES	2	0	0	2	3
	NON-FIELD COURSES	2	0	0	2	3
	NON-FIELD COURSES	2	0	0	2	3
					TOTAL	12
					GENERAL TOTAL	49