

TARIMSAL GENETİK MÜHENDİSLİĞİ BÖLÜMÜ ÇİFT ANA DAL PROGRAMI DERS PLANI (Bitkisel Üretim Ve Teknolojileri Bölümü Öğrencileri İçin Çift Ana Dal Ders Planı)				
Dersin Kodu	Dersin Adı	T.	P	AKTS
2.SEMESTER				
TGM1006	INTRODUCTION TO AGRICULTURAL GENETIC ENGINEERING	2	0	4
TGM1008	BIOLOGY OF CROP SPECIES	2	2	5
3.SEMESTER				
TGM2011	INTRODUCTION TO BIOTECHNOLOGY	2	0	3
TGM2013	PROFESSIONAL ENGLISH	2	0	2
4.SEMESTER				
TGM2008	PLANT SYSTEMATICS	2	1	4
TGM2010	PLANT CELL, TISSUE AND ORGAN CULTURE	2	2	5
TGM2012	PLANT GENETIC RESOURCES	2	0	3
5. SEMESTER				
TGM3005	PLANT GENETIC ENGINEERING	2	1	6
	TECHNICAL ELECTIVE COURSE I	2	1	5
	TECHNICAL ELECTIVE COURSE II	2	1	4
	TECHNICAL ELECTIVE COURSE III	2	1	4
6. SEMESTER				
TGM3002	APPLIED PLANT BREEDING	2	1	4
TGM3006	BIOINFORMATICS	2	1	4
	TECHNICAL ELECTIVE COURSE V	2	1	4

	TECHNICAL ELECTIVE COURSE VI	2	1	4
7. SEMESTER				
TGM4000	GRADUATION THESIS	0	2	5
TGM4001	SEED SCIENCE AND TECHNOLOGY	2	2	6
	TECHNICAL ELECTIVE COURSE VII	2	0	5
	TECHNICAL ELECTIVE COURSE VIII	3	0	5
	TECHNICAL ELECTIVE COURSE IX	3	0	5
8. SEMESTER				
TGM4002	SEED PRODUCTION TECHNIQUES	2	2	6
	TECHNICAL ELECTIVE COURSE X	2	2	5
	TECHNICAL ELECTIVE COURSE XI	3	0	5
	TECHNICAL ELECTIVE COURSE XII	3	0	5

SEÇMELİ DERS LİSTESİ				
	TECHNICAL ELECTIVE COURSE I (1 Ders Seçilecektir)	T.	P	AKTS
TGM3021	TURFGRASS*	2	1	5
TGM3023	ANIMAL PRODUCTION AND TECHNOLOGIES**	2	1	5
TGM3025	CLIMATE CHANGE***	2	1	5
TGM3027	MODELLING AND DECISION SUPPORT SYSTEMS	2	1	5
TGM3029	HYDROLOGY****	2	1	5

* Ana Dalında BUT4041 TURFGRASS dersini alan öğrenciler bu dersten muaf tutulacaktır.

**Ana Dalında BUT3021 ANIMAL PRODUCTION AND TECHNOLOGIES dersini alan öğrenciler bu dersten muaf tutulacaktır.

*** Ana Dalında BUT3032 CLIMATE CHANGES dersini alan öğrenciler bu dersten muaf tutulacaktır.

**** Ana Dalında BUT3025 HYDROLOGY dersini alan öğrenciler bu dersten muaf tutulacaktır.

	TECHNICAL ELECTIVE COURSE II-III (2 Ders Seçilecektir)	T.	P	AKTS
TGM3031	CYTOGENETICS	2	1	4
TGM3033	QUANTITATIVE GENETICS	2	1	4
TGM3035	POPULATION GENETICS	2	1	4

	TECHNICAL ELECTIVE COURSE V-VI (2 Ders Seçilecektir)	T.	P	AKTS
TGM3040	MOLECULAR MARKERS	2	1	4
TGM3042	MOLECULAR TECHNIQUES IN PLANT BREEDING*	2	1	4
TGM3044	RECOMBINANT DNA TECHNOLOGY	2	1	4

* Ana Dalında BUT3044 MOLECULAR PLANT BREEDING dersini alan öğrenciler bu dersten muaf tutulacaktır.

	TECHNICAL ELECTIVE COURSE VII (1 Ders Seçilecektir)	T.	P	AKTS
TGM4033	THE HISTORY OF AGRICULTURE AND DEONTOLOGY	2	0	5
TGM4035	BIOSAFETY	2	0	5
TGM4037	LEGISLATION OF BREEDER'S RIGHTS	2	0	5
TGM4039	BIOTECHNOLOGY AND SOCIETY	2	0	5

	TECHNICAL ELECTIVE COURSE VIII-IX (2 Ders Seçilecektir)	T.	P	AKTS
TGM4041	EVOLUTION AND ORIGIN OF PLANT SPECIES	3	0	5
TGM4043	INTRODUCTION TO PROTEOMICS	3	0	5
TGM4045	INTRODUCTION TO GENOMICS	3	0	5
TGM4047	INTRODUCTION TO METABOLOMICS	3	0	5

	TECHNICAL ELECTIVE COURSE X (1 Ders Seçilecektir)	T.	P	AKTS
TGM4050	BREEDING OF CROSS POLLINATED CROPS	2	2	5
TGM4052	BREEDING OF SELF POLLINATED CROPS	2	2	5
TGM4054	BREEDING OF VEGETATIVELY PROPAGATED CROPS	2	2	5

Bu belge 4070 sayılı Elektronik İmza Kanununun 4. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır. <http://www.guvnetim.gov.tr>



TGM4056	ROOTSTOCK BREEDING	2	2	5
TGM4058	MUTATION BREEDING	2	2	5
	TECHNICAL ELECTIVE COURSE XI-XII (2 Ders Seçilecektir)	T.	P	AKTS
TGM4060	BREEDING FOR ABIOTIC STRESS	3	0	5
TGM4062	BREEDING FOR BIOTIC STRESS	3	0	5
TGM4064	BREEDING FOR NUTRITIONAL QUALITY	3	0	5
TGM4066	HAPLOIDY	3	0	5

TARIMSAL GENETİK MÜHENDİSLİĞİ BÖLÜMÜ				
ÇİFT ANA DAL PROGRAMI DERS PLANI				
(Hayvansal Üretim ve Teknolojileri Bölümü Öğrencileri İçin Çift Ana Dal Ders Planı)				
Dersin Kodu	Dersin Adı	T.	P	AKTS
2. SEMESTER				
TGM1006	INTRODUCTION TO AGRICULTURAL GENETIC ENGINEERING	2	0	4
TGM1008	BIOLOGY OF CROP SPECIES	2	2	5
3. SEMESTER				
TGM2009	PLANT PRODUCTION AND TECHNOLOGIES	2	2	5
TGM2011	INTRODUCTION TO BIOTECHNOLOGY	2	0	3
TGM2013	PROFESSIONAL ENGLISH	2	0	2
4. SEMESTER				
TGM2002	PLANT PHYSIOLOGY	2	1	4
TGM2004	HORTICULTURE	2	1	4
TGM2006	FIELD CROPS	2	1	4
TGM2008	PLANT SYSTEMATICS	2	1	4
TGM2010	PLANT CELL, TISSUE AND ORGAN CULTURE	2	2	5
TGM2012	PLANT GENETIC RESOURCES	2	0	3
5. SEMESTER				
TGM3001	PHYTOPATHOLOGY	2	1	5
TGM3003	PRINCIPLES OF PLANT BREEDING	2	1	6
TGM3005	PLANT GENETIC ENGINEERING	2	1	6
	TECHNICAL ELECTIVE COURSE I	2	1	5
	TECHNICAL ELECTIVE COURSE II	2	1	4
	TECHNICAL ELECTIVE COURSE III	2	1	4
6. SEMESTER				
TGM3002	APPLIED PLANT BREEDING	2	1	4
TGM3004	ENTOMOLOGY	2	1	4
TGM3006	BIOINFORMATICS	2	1	4
TGM3008	INTERNSHIP II	0	0	6
7. SEMESTER				
	TECHNICAL ELECTIVE COURSE V-VI (2 Ders Seçilecektir)	2	1	4
TGM4000	GRADUATION THESIS	0	2	5
TGM4001	SEED SCIENCE AND TECHNOLOGY	2	2	6
	TECHNICAL ELECTIVE COURSE VII	2	0	5
	TECHNICAL ELECTIVE COURSE VIII	3	0	5
	TECHNICAL ELECTIVE COURSE IX	3	0	5
TGM4002	SEED PRODUCTION TECHNIQUES	2	2	6

Bu belge 5070 sayılı Elektronik İmza Kanununun 5. maddesine göre güvenli elektronik imza ile imzalanmıştır.



	TECHNICAL ELECTIVE COURSE X	2	2	5
	TECHNICAL ELECTIVE COURSE XI	3	0	5
	TECHNICAL ELECTIVE COURSE XII	3	0	5

SEÇMELİ DERS LİSTESİ				
	TECHNICAL ELECTIVE COURSE I (1 Ders Seçilecektir)	T.	P	AKTS
TGM3021	TURFGRASS	2	1	5
TGM3025	CLIMATE CHANGE*	2	1	5
TGM3027	MODELLING AND DECISION SUPPORT SYSTEMS	2	1	5
TGM3029	HYDROLOGY	2	1	5

*Ana Dalında HUT3028 CLIMATE CHANGES dersini alan öğrenciler bu dersten muaf tutulacaktır.

	TECHNICAL ELECTIVE COURSE II-III (2 Ders Seçilecektir)	T.	P	AKTS
TGM3031	CYTOGENETICS	2	1	4
TGM3033	QUANTITATIVE GENETICS	2	1	4
TGM3035	POPULATION GENETICS*	2	1	4

* Ana Dalında HUT3023 POPULATION GENETICS dersini alan öğrenciler bu dersten muaf tutulacaktır.

	TECHNICAL ELECTIVE COURSE V-VI (2 Ders Seçilecektir)	T.	P	AKTS
TGM3040	MOLECULAR MARKERS*	2	1	4
TGM3042	MOLECULAR TECHNIQUES IN PLANT BREEDING	2	1	4
TGM3044	RECOMBINANT DNA TECHNOLOGY**	2	1	4

* Ana Dalında HUT3024 MOLECULAR MARKERS dersini alan öğrenciler bu dersten muaf tutulacaktır.

**Ana Dalında HUT3026 RECOMBINANT DNA TECHNOLOGY dersini alan öğrenciler bu dersten muaf tutulacaktır.

	TECHNICAL ELECTIVE COURSE VII (1 Ders Seçilecektir)	T.	P	AKTS
TGM4033	THE HISTORY OF AGRICULTURE AND DEONTOLOGY	2	0	5
TGM4035	BIOSAFETY	2	0	5
TGM4037	LEGISLATION OF BREEDER'S RIGHTS	2	0	5
TGM4039	BIOTECHNOLOGY AND SOCIETY	2	0	5

	TECHNICAL ELECTIVE COURSE VIII-IX (2 Ders Seçilecektir)	T.	P	AKTS
TGM4041	EVOLUTION AND ORIGIN OF PLANT SPECIES	3	0	5
TGM4043	INTRODUCTION TO PROTEOMICS	3	0	5
TGM4045	INTRODUCTION TO GENOMICS	3	0	5
TGM4047	INTRODUCTION TO METABOLOMICS	3	0	5

	TECHNICAL ELECTIVE COURSE X (1 Ders Seçilecektir)	T.	P	AKTS
TGM4050	BREEDING OF CROSS POLLINATED CROPS	2	2	5
TGM4052	BREEDING OF SELF POLLINATED CROPS	2	2	5
TGM4054	BREEDING OF VEGETATIVELY PROPAGATED CROPS	2	2	5
TGM4056	ROOTSTOCK BREEDING	2	2	5
TGM4058	MUTATION BREEDING	2	2	5

	TECHNICAL ELECTIVE COURSE XI-XII (2 Ders Seçilecektir)	T.	P	AKTS
TGM4060	BREEDING FOR ABIOTIC STRESS	3	0	5
TGM4062	BREEDING FOR BIOTIC STRESS	3	0	5
TGM4064	BREEDING FOR ABNORMAL CLIMATIC CONDITIONS	3	0	5
TGM4066	HAPLOIDY	3	0	5



Bu belge 9070 sayılı Elektronik İmza Kanununun 3. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır. 5