ABDULLAH GÜL ÜNİVERSİTESİ / ABDULLAH GÜL UNIVERSITY Moleküler Biyoloji ve Genetik Lisans Programı /

Molecular Biology and Genetics Undergraduate Program

(Lisans eğitimine 2017 Güz döneminden itibaren başlayanlar için) (For students who start their undergraduate education in Fall 2017

1. SINIF / GÜZ YARIYILI (Freshman Year / FALL Semester)

Course Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MATH 151	Calculus I		5	0	5	6
MBG 101	Basic Principles of Biology I		3	0	3	4
MBG 103	General Biology Lab I		0	4	4	3
MBG 105	Chemistry for Life Sciences I		3	2	4	4
ENG 101	English I		4	0	4	4
PHYS 101	Physics I		3	2	4	5
GLB 101	AGU Ways		3	0	3	4
	Total Credits		21	8	27	30

1. SINIF / BAHAR YARIYILI (Freshman Year / SPRING Semester)

Course Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MATH 152	Calculus II	MATH 151	5	0	5	6
MBG 102	Basic Principles of Biology II		3	0	3	5
MBG 104	General Biology Lab II		0	4	4	5
MBG 106	Chemistry for Life Sciences II		3	2	4	6
GLB XXX	Global Issues Elective I		3	0	3	4
ENG 102	English II		4	0	4	4
	Total Credits		18	6	23	30

2. SINIF / GÜZ YARIYILI (Sophomore Year / FALL Semester)

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MBG 205	Cell Biology	MBG 101	3	4	5	8
MBG 207	Organic Chemistry	MBG 105, MBG 106	3	2	4	6
MBG 209	Fundamentals of Genetics		3	4	5	8
GLB XXX	Global Issues Elective II		3	0	3	4
TURK 101	Turkish I		2	0	2	2
	Total Credits	7	14	10	19	28

2. SINIF / BAHAR VARIVILI (Sophomore Year / SPRING Semester)

Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MBG 204	Biostatistics		3	2	4	6
MBG 206	Microbiology	MBG 102	3	4	5	7
MBG 208	Molecular Biology	MBG 102	3	4	5	8
MBG 210	Science and Ethics		2	0	2	5
GLB XXX	Global Issues Elective III		3	0	3	4
TURK 102	Turkish II		2	0	2	2
	Total Credits		17	10	21	32

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3. SINIF / GÜZ YARIYILI (Junior Year / FALL Semester)

Course Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MBG 301	General Biochemistry I	MBG 101	3	4	5	8
MBG 305	Special Techniques and Applications in Molecular Biology	MBG 208	3	2	4	6
MBG 309	Human Genetics	MBG 209	3	0	3	5
	Concentration Area Elective					5
GLB XXX	Global Issues Elective IV		3	0	3	4
HIST 201	History of Modern Turkey I		2	0	2	2
	Total Credits		14	6	17	30

3. SINIF / BAHAR YARIYILI (Junior Year / SPRING Semester)

Course Code	Course Name	PreReq	Lec.	Lab	Credits	ECTS
MBG 302	General Biochemistry II	MBG 301	3	4	5	8
MBG 304	Bioinformatics		3	2	4	6
MBG 306	Gene Regulation	MBG 209	3	0	3	6
	Concentration Area Elective					5
XXX	Nontechnical Elective		3	0	3	3
HIST 202	History of Modern Turkey II		2	0	2	2
	Total Credits		17	6	20	30

4. SINIF / GÜZ YARIYILI (Senior Year / FALL Semester)

Course Code	Course Name	PreReq.	Lec.	Lab	Credits	ECTS
MBG 451	Capstone Projects I*		0	4	4	8
	Concentration Area Elective					5
	Concentration Area Elective					5
	Concentration Area Elective					5
XXX	Nontechnical Elective					3
	Summer Internship		0	0	0	6
	Total Credits			4	4	32

^{* 1}st and 2nd year core courses must be completed (passed). From 3rd year courses 4 out of 6 core courses should be passed.

4 SINIF / RAHAR VARIVILI (Senior Vear / SPRING Semester)

Course Code	Course Name	PreReq.	Lec.	Lab	Credits	ECTS
MBG 452	Capstone Projects II**	MBG 451	0	6	6	8
MBG 404	Current Topics in Molecular Biology***		3	0	3	7
	Concentration Area Elective					5
	Concentration Area Elective	4				5
	Nontechnical Elective		3	0	3	3
	Total Credits		6	6	12	28

^{** 1}st and 2nd year core courses must be completed (passed). From 3rd year courses 4 out of 6 core courses and MBG451 Capstone Projects I should be passed.

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^{***} The course will be given by the all faculty members.

Concentration Area Electives

Code	Course Name	Lec.	Lab	Credits	ECTS
MBG 402	Computational Biology	3	0	3	5
MBG403	Human Genetic Disorders	3	0	3	5
MBG405	Molecular Evolution	3	0	3	5
MBG406	Molecular Medicine	3	0	3	5
MBG407	Stem Cells	3	0	3	5
MBG409	Cancer Biology	3	0	3	5
MBG408	Biomolecules	3	0	3	3
MBG410	Micro Array Data Analysis	3	0	3	5
MBG411	Model Organisms	3	0	3	5
MBG412	Immunology	3	0	3	5
MBG413	Biotechnology	3	0	3	3
MBG414	Biomaterials	3	0	3	5
MBG415	Cell and Tissue Engineering	3	0	3	5
MBG416	Developmental Biology	3	0	3	5
MBG417	Basics of Neuroscience	3	0	3	3
MBG418	Neural system	3	0	3	5
MBG419	Functional Genomics	3	0	3	5

GLB Electives

(4 GLB courses must be taken / 4 GLB kodlu ders alınmak zorundadır)

Code	Course Name	Lec.	Lab	Credits	ECTS
GLB 102	Innovation and Entrepreneurship	3	0	3	4
GLB 201	Food and Health	3	0	3	4
GLB 202	Immigration and Population	3	0	3	4
GLB 301	Sustainability	3	0	3	4

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