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EĞİTİMDE KALİTE GÜVENCESİ GÜZ DÖNEMİ RAPORU

*QUALITY ASSURANCE IN
EDUCATION FALL SEMESTER
REPORT*

FEN FAKÜLTESİ
FACULTY OF SCIENCES

**MOLEKÜLER BİYOLOJİ VE GENETİK
LİSANS PROGRAMI (MBG)**
*MOLECULAR BIOLOGY AND GENETICS
UNDERGRADUATE PROGRAM (MBG)*



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FEN FAKÜLTESİ / FACULTY OF SCIENCES
MOLEKÜLER BİYOLOJİ VE GENETİK LİSANS
PROGRAMI - MBG / MOLECULAR BIOLOGY AND GENETICS
UNDERGRADUATE PROGRAM - MBG

1. LİSANS PROGRAMI / UNDERGRADUATE PROGRAM

1.1. MÜFREDAT / CURRICULUM

Birinci Yıl / First Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
CHEM 101	Kimyanın Temelleri I / Principles of Chemistry I	3	4	4	6.5
ENG 101	İngilizce ve Kompozisyon I / English and Composition I	5	0	3	5
GE 100	Üniversite Hayatına Giriş / Orientation	0	0	1	2
MATH 101	Matematik I / Calculus I	4	0	4	6.5
MBG 101	Biyoloji I / Biology I	3	4	4	6.5
TURK 101	Türkçe I / Turkish I	0	0	2	3.5
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
CHEM 102	Kimyanın Temelleri II / Principles of Chemistry II	3	4	4	6.5
ENG 102	İngilizce ve Kompozisyon II / Principles of Chemistry II	5	0	3	5
MATH 102	Matematik II / Calculus II	4	0	4	6.5
MBG 102	Biyoloji II / Biology II	3	4	4	6.5
TURK 102	Türkçe II / Turkish II	0	0	2	3.5
İkinci Yıl / Second Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
CS 115	Python ile Programlamaya Giriş / Introduction to Programming in Python	3	4	4	6.5
GE 250	Üniversite Etkinlik Programı I / Collegiate Activities Program I	0	0	0	1
HIST 200	Türkiye Tarihi / History of Turkey	3	0	4	6.5
MBG 210	Genetik / Genetics	3	4	4	6.5
PHYS 101	Genel Fizik I / General Physics I	3	3	4	6.5
	Teknik Seçmeli Ders / Technical Elective			3	
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
GE 251	Üniversite Etkinlik Programı II / Collegiate Activities Program II	0	0	1	2
MATH 262	İstatistik Yöntemleri / Statistical Methodology	3	0	3	5
MBG 223	Moleküler Genetik / Molecular Genetics	3	4	4	6.5
MBG 230	Moleküler ve Hücre Biyolojisinde Deneysel Yaklaşımlar / Experimental Approaches in Molecular and Cellular Biology	3	0	3	5
PHYS 102	Genel Fizik II / General Physics II	3	3	4	6.5
	Temel Sanat Seçmeli Dersi / Arts Core Elective			3	
	Sınırlı Seçmeli Ders / Restricted Elective			3	

Üçüncü Yıl / Third Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
COMD 358	Profesyonel İletişim / Professional Communication	3	0	3	5
HUM 111	Kültürler, Medeniyetler ve Düşünceler I / Cultures Civilizations and Ideas I	3	0	3	5
MBG 291	Yaz Stajı I / Summer Practice I	0	0	0	6
MBG 301	Moleküler Hücre Biyolojisi I / Molecular Biology of the Cell I	3	0	3	5
MBG 311	Biyokimya I / Biochemistry I	3	4	4	6.5
MBG 324	Gen Moleküler Biyolojisi / Molecular Biology of the Gene	3	4	4	6.5
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
HUM 112	Kültürler, Medeniyetler ve Düşünceler II / Cultures Civilizations and Ideas II	3	0	3	5
MBG 302	Moleküler Hücre Biyolojisi II / Molecular Biology of the Cell II	3	4	4	6.5
MBG 312	Biyokimya II / Biochemistry II	3	0	3	5
MBG 316	Fizyoloji / Physiology	3	0	3	5
MBG 338	Mikrobiyoloji / Microbiology	3	4	4	6.5

Dördüncü Yıl / Fourth Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
MBG 391	Yaz Stajı II / Summer Practice II	0	0	0	6.5
MBG 416	Bilim ve Etik / Science and Ethics	3	0	3	5
MBG 491	Mezuniyet Projesi I / Senior Project I	0	6	3	5
	Sınırlı Seçmeli Ders / Restricted Elective			3	
	Teknik Seçmeli Ders (2) / Technical Elective (2)			6	
Bahar Dönemi / Spring Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
	Teknik Olmayan Seçmeli Ders / Non-Technical Elective			3	
	Sınırlı Seçmeli Ders / Restricted Elective			3	
	Temel Sosyal Bilimler Seçmeli Ders / Social Science Core Elective			3	
	Teknik Seçmeli Ders / Technical Elective			3	

2. PROGRAM ÇIKTILARI / PROGRAM OUTCOMES

2.1. PROGRAM ÇIKTILARININ LİSTESİ / LIST OF PROGRAM OUTCOMES

- a. Yaşam bilimlerindeki küresel problemlere yaratıcı çözümler bulmak için modern bilgi, düşünme şekli ve araçları kullanır. / *Introduce modern knowledge, thought process, and tools to develop creative solutions for global challenges in life sciences.*
- b. Biyolojik deneyler yapabilir, analiz edebilir ve sonuçlarını yorumlayabilir. / *Able to conduct, analyze, interpret results of biological experiments.*
- c. Bir projede uzman ve disiplinler arası takımların takım üyesi olarak çalışabilir. / *Able to function as a team member of specialized and interdisciplinary teams in a project.*
- d. Yaşam bilimleri araştırmalarında etik ilkeleri uygulayabilir. / *Able to apply ethical principles in life science research.*
- e. Bilimsel, küresel, ekonomik, çevresel ve toplumsal ihtiyaçlar bağlamında araştırma sonuçlarını hem yazılı hem de sözlü formatta çeşitli gruplara aktarabilmek için iletişim becerilerini geliştirir. / *Develop skills to communicate research output in both written and oral formats in the context of scientific, global, economic, environmental, and society needs in order to effectively organize ideas and convey them to various audiences.*
- f. Bilimsel literatürü eleştirel bir şekilde analiz edebilir ve yaşam boyu öğrenmeyi sürdürebilir. / *Able to critically analyze scientific literature and to engage in lifelong learning.*
- g. İlgili hesaplamalı ve biyoinformatik araçlarıyla araştırma yapar. / *Conduct research with relevant computational and bioinformatics tools.*
- h. Derslerin yanı sıra çeşitli ve yaratıcı, sanatsal, kültürel, sportif ve entelektüel faaliyetlere katılarak kampüs hayatından yararlanır. / *Take advantage of the campus life in a diverse and creative manner through artistic, cultural, sportive and intellectual activities outside of coursework.*

2.2. PROGRAM ÇIKTILARI - DERSLER MATRİSİ / PROGRAM OUTCOMES - COURSES TABLE

Dersler / Courses	Program Çıktıları / Program Outcomes								Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h		a	b	c	d	e	f	g	h
CHEM 101	✓	✓							MBG 223	✓	✓	✓					
CHEM 102	✓	✓	✓						MBG 230	✓	✓		✓		✓		
COMD 358			✓		✓				MBG 291		✓	✓	✓	✓	✓		
CS 115	✓							✓	MBG 301	✓			✓	✓	✓		
ENG 101					✓				MBG 302	✓	✓		✓	✓	✓		
ENG 102					✓				MBG 311	✓	✓						
GE 100						✓		✓	MBG 312	✓							
GE 250						✓		✓	MBG 316	✓		✓		✓			
GE 251						✓		✓	MBG 324	✓	✓	✓	✓	✓	✓	✓	
HIST 200			✓		✓				MBG 338	✓	✓	✓		✓			
HUM 111					✓	✓			MBG 391		✓	✓	✓	✓	✓		
HUM 112					✓	✓			MBG 416				✓	✓			
MATH 101	✓	✓	✓						MBG 491	✓		✓	✓	✓			
MATH 102	✓	✓	✓						PHYS 101	✓				✓			
MATH 262	✓								PHYS 102	✓				✓			
MBG 101	✓	✓	✓	✓	✓	✓	✓		TURK 101					✓			
MBG 102	✓	✓	✓	✓	✓	✓			TURK 102					✓			
MBG 210	✓	✓	✓	✓													

Tablo.2.2. Moleküler Biyoloji ve Genetik Lisans Programı - Program Çıktıları ve Dersler Tablosu / *Table.2.2. Molecular Biology and Genetics Undergraduate Program - Program Outcomes and Courses Table*

3. PERFORMANS ÖLÇÜMLERİNDE KULLANILACAK METRİKLER / METRICS TO BE USED IN PERFORMANCE MEASUREMENT

3.1. PERFORMANS ÖLÇÜMLERİNDE KULLANILACAK DEĞERLENDİRME METOTLARI / EVALUATION METHODS USED IN PERFORMANCE MEASUREMENTS

Course Code	Program Outputs	Lab work	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade								
CHEM 101	a	50	50	100	M3	50								
	Program Outputs	Lab work	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade								
	b	50	50	100	M3	50								
Course Code	Program Outputs	Homework	Homework	Homework	Homework	Midterm	Project	Term project	Presentations	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
COMD 358	c	5	5	5	5	25	30	10	10	5	100	M1	60	70
	Program Outputs	Homework	Homework	Homework	Homework	Midterm	Project	Term project	Presentations	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	5	5	5	5	25	30	10	10	5	100	M1	60	70
Course Code	Program Outputs	Lab exam	Midterm:Essay /written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
CS 115	a	20	40	40	100	M1	40	75						
	Program Outputs	Lab exam	Midterm:Essay /written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	g	20	40	40	100	M1	40	75						
Course Code	Program Outputs	Academic Essay 1	Essay	Oral Presentation	Student Led Discussion	Academic Summary and Critical Response Task	Self-progress Reflection Task	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
ENG 101	e	20	25	8	7	10	5	25	100	M1	70	75		

Course Code	Program Outputs	Library Skills Task	Academic Essay	Oral Presentation	Research Paper Outline	Research essay	Interviews	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
ENG 102	e	5	20	20	10	30	15	100	M1	70	70	
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
GE 100	f	100	100	M1	12	80						
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	h	100	100	M1	12	80						
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
GE 251	f	100	100	M1	70	70						
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
	h	100	100	M1	70	70						
Course Code	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
HIST 200	c	10	60	30	100	M1	70	75				
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	e	10	60	30	100	M1	70	75				
Course Code	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
HUM 111	e	30	30	10	30	100	M1	60	75			
	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	f	30	30	10	30	100	M1	60	75			

Course Code	Program Outputs	Quizzes	In-class participation	Final:Essay/written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
HUM 112	e	30	10	30	30	100	M1	60	75			
	Program Outputs	Quizzes	In-class participation	Final:Essay/written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	f	30	10	30	30	100	M1	60	75			
Course Code	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
MATH 101	a	25	25	30	10	10	100	M1	40	50		
	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	b	25	25	30	10	10	100	M1	40	50		
	Program Outputs	Midterm	Midterm	Final	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	c	25	25	30	10	10	100	M1	40	50		
Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
MATH 102	a	30	30	40	100	M1	40	50				
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	b	30	30	40	100	M1	40	50				
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	c	30	30	40	100	M1	40	50				
Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MBG 101	a	20	20	5	5	30	20	100	M1	50	50	
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	b	20	20	5	5	30	20	100	M1	50	50	
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	c	20	20	5	5	30	20	100	M1	50	50	

Course Code	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
MBG 101	d	20	20	5	5	30	20	100	M1	50	50			
	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	e	20	20	5	5	30	20	100	M1	50	50			
	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	f	20	20	5	5	30	20	100	M1	50	50			
	Program Outputs	Midterm:Essay /written	Midterm:Essay /written	Quiz	Quiz	Final:Open-book	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
g	20	20	5	5	30	20	100	M1	50	50				
Course Code	Program Outputs	Final:Essay/ written	Midterm:Essay /written	Midterm:Essay /written	Lab work	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MBG 210	a	30	20	20	25	1	1	1	1	1	100	M1	50	50
	Program Outputs	Final:Essay/ written	Midterm:Essay /written	Midterm:Essay /written	Lab work	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	b	30	20	20	25	1	1	1	1	1	100	M1	50	50
	Program Outputs	Final:Essay/ written	Midterm:Essay /written	Midterm:Essay /written	Lab work	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	30	20	20	25	1	1	1	1	1	100	M1	50	50
	Program Outputs	Final:Essay/ written	Midterm:Essay /written	Midterm:Essay /written	Lab work	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
d	30	20	20	25	1	1	1	1	1	100	M1	50	50	
Course Code	Program Outputs	Midterm:Open-Book	Midterm:Open-Book	Final:Open-book	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
MBG 301	a	20	20	35	5	5	15	100	M1	50	50			
	Program Outputs	Midterm:Open-Book	Midterm:Open-Book	Final:Open-book	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	d	20	20	35	5	5	15	100	M1	50	50			
	Program Outputs	Midterm:Open-Book	Midterm:Open-Book	Final:Open-book	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	e	20	20	35	5	5	15	100	M1	50	50			
	Program Outputs	Midterm:Open-Book	Midterm:Open-Book	Final:Open-book	Quiz	Quiz	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
f	20	20	35	5	5	15	100	M1	50	50				

Course Code	Program Outputs	Quiz	Midterm:Essay /written	Midterm:Open-Book	Final:Essay/ written	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
MBG 311	a	20	20	20	20	20	100	M1	50	50				
	Program Outputs	Quiz	Midterm:Essay /written	Midterm:Open-Book	Final:Essay/ written	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	b	20	20	20	20	20	100	M1	50	50				
Course Code	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work
MBG 324	a	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2
		Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		2	2	2	2	5	100	M1	50	50				
	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work
	b	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2
		Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		2	2	2	2	5	100	M1	50	50				
	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work
	c	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2
		Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		2	2	2	2	5	100	M1	50	50				
	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work
	d	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2
		Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		2	2	2	2	5	100	M1	50	50				
	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work
	e	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2
		Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
		2	2	2	2	5	100	M1	50	50				

Course Code	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work	
MBG 324	f	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2	
		Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
		2	2	2	2	5	100	M1	50	50					
	Program Outputs	Midterm	Midterm	Quiz	Quiz	Quiz	Quiz	Final	Lab exam	Lab exam	Lab exam	Lab exam	Lab exam	Lab work	
	g	20	20	2,5	2,5	2,5	2,5	30	1	1	1	1	1	2	
		Lab work	Lab work	Lab work	Lab work	Lab work	Lab exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
2		2	2	2	5	100	M1	50	50						
Course Code	Program Outputs	Quiz	Quiz	Quiz	Midterm:Essay /written	Midterm:Essay /written	Presentations	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
MBG 416	d	5	5	5	20	20	25	20	100	M1	50	50			
	Program Outputs	Quiz	Quiz	Quiz	Midterm:Essay /written	Midterm:Essay /written	Presentations	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	e	5	5	5	20	20	25	20	100	M1	50	50			
Course Code	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)									
MBG 491	a	100	100	M1	50	50									
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)									
	c	100	100	M1	50	50									
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)									
	d	100	100	M1	50	50									
	Program Outputs	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)									
e	100	100	M1	50	50										

Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 101	a	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	15	20	10	10	25	20	100	M1	50	50
Course Code	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 102	a	15	20	10	10	25	20	100	M1	50	50
	Program Outputs	Midterm	Midterm	Quiz	Homework	Final	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	15	20	10	10	25	20	100	M1	50	50
Course Code	Program Outputs	Blog	Final exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 101	e	70	30	100	M1	70	60				
Course Code	Program Outputs	Blog	Final exam	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 102	e	70	30	100	M1	70	60				

- **Ölçümlerde Kullanılan Metotlarla İlgili Açıklamalar / Explanations About the Methods Used in Measurements**

Bütün metotlar için sadece dersi geçen öğrencilerin notları kullanılacaktır. / For all methods, only the grades of students who pass the course will be used.

- G = Bölüm tarafından belirlenmiş olan başarılı sayılabilecek minimum not / G = Minimum grade that can be considered successful as determined by the department
- T = Program çıktısı başarısı için eşik değer / T = Threshold value for program output success
- M1: Öğrencilerin %T'sinin not ortalamasının G veya üzerinde olması / M1: T% of students have a grade point average of G or above
- M2: Öğrencilerin %T'sinin bölüm ortalaması üzerinde not almış olması / M2: %T of students have received grades above the department average
- M3: Öğrencilerin not ortalamasının G veya üzerinde olması / M3: Students' grade point average should be G or above
- M4: Öğrencilerin %T'sinin not ortalamasının dersi alan tüm öğrencilerin ortalamasına eşit veya daha yüksek olması / M4: The GPA of %T of students is equal to or higher than the average of all students taking the course

3.2. PERFORMANS ÖLÇÜMLERİNDE KULLANILAN METOTLAR VE PERFORMANS SONUÇ DETAYLARI / METHODS USED IN PERFORMANCE MEASUREMENTS AND PERFORMANCE RESULT DETAILS

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı/ Number of Students (All)	Toplam Dept. Öğrenci Sayısı/ Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
CHEM 101 - Kimyanın Temelleri I / CHEM 101 - Principles of Chemistry I													
a	M3	50		115	48	75.86	75.04	114	48	99.13	100	Yeterli ✓ / Sufficient ✓	75.04
b	M3	50		115	48	75.86	75.04	114	48	99.13	100	Yeterli ✓ / Sufficient ✓	75.04
COMD 358 - Profesyonel İletişim / COMD 358 - Professional Communication													
c	M1	60	70	501	49	83.99	89.56	493	49	98.4	100	Yeterli ✓ / Sufficient ✓	100
e	M1	60	70	501	49	83.99	89.56	493	49	98.4	100	Yeterli ✓ / Sufficient ✓	100
CS 115 - Python ile Programlamaya Giriş / CS 115 - Introduction to Programming in Python													
a	M1	40	75	378	31	70.37	61.01	366	27	96.83	87.1	Yeterli ✓ / Sufficient ✓	87.1
g	M1	40	75	378	31	70.37	61.01	366	27	96.83	87.1	Yeterli ✓ / Sufficient ✓	87.1
ENG 101 - İngilizce ve Kompozisyon I / ENG 101 - English and Composition I													
e	M1	70	75	1702	53	82.4	84.2	1593	51	93.6	96.23	Yeterli ✓ / Sufficient ✓	96.23
ENG 102 - İngilizce ve Kompozisyon II / ENG 102 - English and Composition II													
e	M1	70	70	616	19	86.42	88.65	603	19	97.89	100	Yeterli ✓ / Sufficient ✓	100
GE 100 - Üniversite Hayatına Giriş / GE 100 - Orientation													
f	M1	12	80	1678	55	97.32	99	1678	55	100	100	Yeterli ✓ / Sufficient ✓	100
h	M1	12	80	1678	55	97.32	99	1678	55	100	100	Yeterli ✓ / Sufficient ✓	100
GE 251 - Üniversite Etkinlik Programı II / GE 251 - Collegiate Activities Program II													
f	M1	70	70	974	22	92.76	99.77	898	22	92.2	100	Yeterli ✓ / Sufficient ✓	100
h	M1	70	70	974	22	92.76	99.77	898	22	92.2	100	Yeterli ✓ / Sufficient ✓	100

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Threshold Percentage (%)	Toplam Öğrenci Sayısı/ Number of Students (All)	Toplam Dept. Öğrenci Sayısı/ Number of Students (Dept.)	Tüm Öğrenci Ort./ Average (All Std.)	Dept. Öğrenci Ort./ Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
HIST 200 - Türkiye Tarihi / HIST 200 - History of Turkey													
c	M1	70	75	1036	48	93.59	94.65	1026	48	99.03	100	Yeterli ✓ / Sufficient ✓	100
e	M1	70	75	1036	48	93.59	94.65	1026	48	99.03	100	Yeterli ✓ / Sufficient ✓	100
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / HUM 111 - Cultures Civilizations and Ideas I													
e	M1	60	75	1139	53	84.61	87.61	1135	53	99.65	100	Yeterli ✓ / Sufficient ✓	100
f	M1	60	75	1139	53	84.61	87.61	1135	53	99.65	100	Yeterli ✓ / Sufficient ✓	100
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / HUM 112 - Cultures Civilizations and Ideas II													
e	M1	60	75	287	5	84.87	93.8	285	5	99.3	100	Yeterli ✓ / Sufficient ✓	100
f	M1	60	75	287	5	84.87	93.8	285	5	99.3	100	Yeterli ✓ / Sufficient ✓	100
MATH 101 - Matematik I / MATH 101 - Calculus I													
a	M1	40	50	682	53	63.69	56.62	607	43	89	81.13	Yeterli ✓ / Sufficient ✓	81.13
b	M1	40	50	682	53	63.69	56.62	607	43	89	81.13	Yeterli ✓ / Sufficient ✓	81.13
c	M1	40	50	682	53	63.69	56.62	607	43	89	81.13	Yeterli ✓ / Sufficient ✓	81.13
MATH 102 - Matematik II / MATH 102 - Calculus II													
a	M1	40	50	258	18	53.52	42.84	181	9	70.16	50	Yeterli ✓ / Sufficient ✓	50
b	M1	40	50	258	18	53.52	42.84	181	9	70.16	50	Yeterli ✓ / Sufficient ✓	50
c	M1	40	50	258	18	53.52	42.84	181	9	70.16	50	Yeterli ✓ / Sufficient ✓	50
MBG 101 - Biyoloji I / MBG 101 - Biology I													
a	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86
b	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86
c	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86
d	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Threshold Percentage (%)	Toplam Öğrenci Sayısı/ Number of Students (All)	Toplam Dept. Öğrenci Sayısı/ Number of Students (Dept.)	Tüm Öğrenci Ort. / Average (All Std.)	Dept. Öğrenci Ort. / Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
MBG 101 - Biyoloji I / MBG 101 - Biology I													
e	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86
f	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86
g	M1	50	50	79	70	70.33	71.75	71	65	89.87	92.86	Yeterli ✓ / Sufficient ✓	92.86
MBG 210 - Genetik / MBG 210 - Genetics													
a	M1	50	50	55	55	77.65	77.65	54	54	98.18	98.18	Yeterli ✓ / Sufficient ✓	98.18
b	M1	50	50	55	55	77.65	77.65	54	54	98.18	98.18	Yeterli ✓ / Sufficient ✓	98.18
c	M1	50	50	55	55	77.65	77.65	54	54	98.18	98.18	Yeterli ✓ / Sufficient ✓	98.18
d	M1	50	50	55	55	77.65	77.65	54	54	98.18	98.18	Yeterli ✓ / Sufficient ✓	98.18
MBG 301 - Moleküler Hücre Biyolojisi I / MBG 301 - Molecular Biology of the Cell I													
a	M1	50	50	78	75	73.87	74.5	77	74	98.72	98.67	Yeterli ✓ / Sufficient ✓	98.67
d	M1	50	50	78	75	73.87	74.5	77	74	98.72	98.67	Yeterli ✓ / Sufficient ✓	98.67
e	M1	50	50	78	75	73.87	74.5	77	74	98.72	98.67	Yeterli ✓ / Sufficient ✓	98.67
f	M1	50	50	78	75	73.87	74.5	77	74	98.72	98.67	Yeterli ✓ / Sufficient ✓	98.67
MBG 311 - Biyokimya I / MBG 311 - Biochemistry I													
a	M1	50	50	67	67	66.82	66.82	63	63	94.03	94.03	Yeterli ✓ / Sufficient ✓	94.03
b	M1	50	50	67	67	66.82	66.82	63	63	94.03	94.03	Yeterli ✓ / Sufficient ✓	94.03
MBG 324 - Gen Moleküler Biyolojisi / MBG 324 - Molecular Biology of the Gene													
a	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41
b	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41
c	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41
d	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41

Program Çıktısı/ Program Outcome	Yeterlilik Hesaplama Yöntemi/ Method	(Ortalama) Yeterlilik Notu/ Minimum Successful Grade	Yeterlilik Eşiği (%) / Treshold Percentage (%)	Toplam Öğrenci Sayısı/ Number of Students (All)	Toplam Dept. Öğrenci Sayısı/ Number of Students (Dept.)	Tüm Öğrenci Ort./ Average (All Std.)	Dept. Öğrenci Ort./ Average (Dept. Std.)	Yeterliliği Sağlayan Öğrenci Sayısı (Toplam) / Number of Succ. Students (All)	Yeterliliği Sağlayan Öğrenci Sayısı (Dept.) / Number of Succ. Students (Dept.)	Yeterlilik Oranı (Toplam Öğrenci) / Success Ratio (All)	Yeterlilik Oranı (Bölüm Öğrenci) / Success Ratio (Dept.)	Performans / Performance	Yeterlilik Oranı / Success Ratio
MBG 324 - Gen Moleküler Biyolojisi / MBG 324 - Molecular Biology of the Gene													
e	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41
f	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41
g	M1	50	50	63	63	78.77	78.77	62	62	98.41	98.41	Yeterli ✓ / Sufficient ✓	98.41
MBG 416 - Bilim ve Etik / MBG 416 - Science and Ethics													
d	M1	50	50	64	57	77.33	78.01	64	57	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	64	57	77.33	78.01	64	57	100	100	Yeterli ✓ / Sufficient ✓	100
MBG 491 - Mezuniyet Projesi I / MBG 491 - Senior Project I													
a	M1	50	50	41	40	94.78	95.03	41	40	100	100	Yeterli ✓ / Sufficient ✓	100
c	M1	50	50	41	40	94.78	95.03	41	40	100	100	Yeterli ✓ / Sufficient ✓	100
d	M1	50	50	41	40	94.78	95.03	41	40	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	41	40	94.78	95.03	41	40	100	100	Yeterli ✓ / Sufficient ✓	100
PHYS 101 - Genel Fizik I / PHYS 101 - General Physics I													
a	M1	50	50	620	52	65.09	59.07	568	47	91.61	90.38	Yeterli ✓ / Sufficient ✓	90.38
e	M1	50	50	620	52	65.09	59.07	568	47	91.61	90.38	Yeterli ✓ / Sufficient ✓	90.38
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	201	16	64.05	56.2	171	12	85.07	75	Yeterli ✓ / Sufficient ✓	75
e	M1	50	50	201	16	64.05	56.2	171	12	85.07	75	Yeterli ✓ / Sufficient ✓	75
TURK 101 - Türkçe I / TURK 101 - Turkish I													
e	M1	70	60	1541	43	88.03	89.26	1519	43	98.57	100	Yeterli ✓ / Sufficient ✓	100
TURK 102 - Türkçe II / TURK 102 - Turkish II													
e	M1	70	60	637	20	90.42	90.22	626	20	98.27	100	Yeterli ✓ / Sufficient ✓	100

3.3. PERFORMANS ÖLÇÜM SONUÇLARI / PERFORMANCE MEASUREMENT RESULTS

3.3.1. PROGRAM ÇIKTILARI PERFORMANS TABLOSU / PROGRAM OUTCOMES PERFORMANCE TABLE

Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
CHEM 101	✓	✓						
COMD 358			✓		✓			
CS 115	✓						✓	
ENG 101					✓			
ENG 102					✓			
GE 100						✓		✓
GE 251						✓		✓
HIST 200			✓		✓			
HUM 111					✓	✓		
HUM 112					✓	✓		
MATH 101	✓	✓	✓					
MATH 102	✓	✓	✓					
MBG 101	✓	✓	✓	✓	✓	✓	✓	
MBG 210	✓	✓	✓	✓				
MBG 301	✓			✓	✓	✓		
MBG 311	✓	✓						
MBG 324	✓	✓	✓	✓	✓	✓	✓	
MBG 416				✓	✓			
MBG 491	✓		✓	✓	✓			
PHYS 101	✓				✓			
PHYS 102	✓				✓			
TURK 101					✓			
TURK 102					✓			

Tablo.3.3.1. 2024-2025 Akademik Yılı Güz Dönemi Moleküler Biyoloji ve Genetik Lisans Programı Program Çıktıları Performans Tablosu / **Table.3.3.1.** 2024-2025 Academic Year Fall Semester Molecular Biology and Genetics Undergraduate Program - Program Outcomes Performance Table

3.3.2. PROGRAM ÇIKTILARI PERFORMANS ORANLARI / PROGRAM OUTCOMES PERFORMANCE RATES

Dersler / Courses	Program Çıktıları / Program Outcomes							
	a	b	c	d	e	f	g	h
CHEM 101	75.04	75.04						
COMD 358			100		100			
CS 115	87.1						87.1	
ENG 101					96.23			
ENG 102					100			
GE 100						100		100
GE 251						100		100
HIST 200			100		100			
HUM 111					100	100		
HUM 112					100	100		
MATH 101	81.13	81.13	81.13					
MATH 102	50	50	50					
MBG 101	92.86	92.86	92.86	92.86	92.86	92.86	92.86	
MBG 210	98.18	98.18	98.18	98.18				
MBG 301	98.67			98.67	98.67	98.67		
MBG 311	94.03	94.03						
MBG 324	98.41	98.41	98.41	98.41	98.41	98.41	98.41	
MBG 416				100	100			
MBG 491	100		100	100	100			
PHYS 101	90.38				90.38			
PHYS 102	75				75			
TURK 101					100			
TURK 102					100			

Tablo.3.3.2. 2024-2025 Akademik Yılı Güz Dönemi Moleküler Biyoloji ve Genetik Lisans Programı Program Çıktıları Performans Oranları Tablosu / **Table.3.3.2.** 2024-2025 Academic Year Fall Semester Molecular Biology and Genetics Undergraduate Program - Program Outcomes Performance Rates Table