

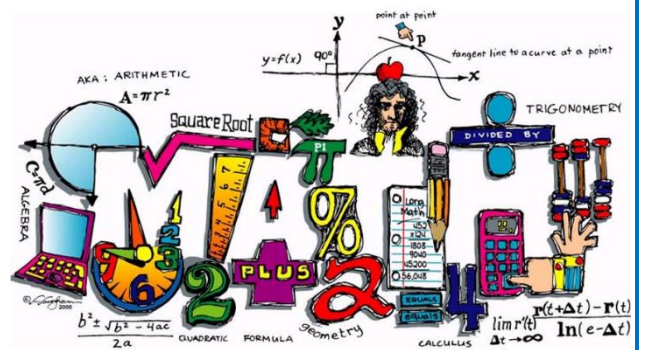
2023-2024 AKADEMİK
YILI / Academic Year

EĞİTİMDE KALİTE GÜVENCESİ GÜZ DÖNEMİ RAPORU

QUALITY ASSURANCE IN
EDUCATION FALL SEMESTER
REPORT

FEN FAKÜLTESİ
FACULTY OF SCIENCES

MATEMATİK LİSANS PROGRAMI (MATH)
MATHEMATICS UNDERGRADUATE PROGRAM
(MATH)



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FEN FAKÜLTESİ / FACULTY OF SCIENCES

MATEMATİK LİSANS PROGRAMI - MATH / MATHEMATICS UNDERGRADUATE PROGRAM - MATH

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
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
MATH 123	Soyut Matematik I / Abstract Mathematics I	4	0	4	6.5
PHYS 101	Genel Fizik I / General Physics I	3	3	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
ENG 102	İngilizce ve Kompozisyon II / English and Composition II	5	0	3	5
MATH 102	Matematik II / Calculus II	4	0	4	6.5
MATH 124	Soyut Matematik II / Abstract Mathematics II	4	0	4	6.5
MBG 110	Modern Biyolojiye Giriş / Introduction to Modern Biology	3	0	3	5
PHYS 102	Genel Fizik II / General Physics II	3	3	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
MATH 213	İleri Matematik I / Advanced Calculus I	4	0	4	6.5
MATH 223	Doğrusal Cebir I / Linear Algebra I	3	0	3	5
MATH 240	Türevsel Denklemler / Differential Equations	3	0	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
GE 251	Üniversite Etkinlik Programı II / Collegiate Activities Program II	0	0	1	2
MATH 210	Sonlu ve Ayrık Matematik / Finite and Discrete Mathematics	3	0	3	5
MATH 214	İleri Matematik II / Advanced Calculus II	4	0	4	6.5
MATH 224	Doğrusal Cebir II / Linear Algebra II	3	0	3	5
	Seçmeli Ders (2) / Elective (2)			6	

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
HUM 111	Kültürler, Medeniyetler ve Düşünceler I / <i>Cultures Civilizations and Ideas I</i>	3	0	3	5
MATH 202	Karmaşık Analiz / <i>Complex Analysis</i>	3	0	3	5
MATH 323	Cebir I / <i>Algebra I</i>	3	0	3	5
	Seçmeli Ders (2) / <i>Elective (2)</i>			6	
	Matematik Seçmeli Dersi / <i>MATH Elective</i>			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
COMD 358	Profesyonel İletişim / <i>Professional Communication</i>	3	0	3	5
HUM 112	Kültürler, Medeniyetler ve Düşünceler II / <i>Cultures Civilizations and Ideas II</i>	3	0	3	5
MATH 253	Sayılar Teorisine Giriş / <i>Introduction to Number Theory</i>	3	0	3	5
	Seçmeli Ders (2) / <i>Elective (2)</i>			6	
	Matematik Seçmeli Dersi / <i>MATH Elective</i>			3	
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
MATH 399	Yaz Stajı / <i>Summer Practice</i>	0	0	0	8
	Seçmeli Ders (2) / <i>Elective (2)</i>			6	
	Matematik Seçmeli Dersi / <i>MATH Elective</i>			3	
	Matematik Proje Seçmeli Dersi / <i>Project Elective</i>			3	
	Temel Sosyal Bilimler Seçmeli Ders / <i>Social Science Core Elective</i>			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
	Temel Sanat Seçmeli Dersi / <i>Arts Core Elective</i>			3	
	Seçmeli Ders (3) / <i>Elective (3)</i>			9	
	Matematik Seçmeli Dersi / <i>MATH Elective</i>			3	

2. PROGRAM ÇIKTILARI / PROGRAM OUTCOMES

2.1. PROGRAM ÇIKTILARININ LİSTESİ / LIST OF PROGRAM OUTCOMES

- Sahip olduğu matematik bilgisini uygular. / *Able to apply knowledge of mathematics.*
- Bir problem için önerilen çözümleri eleştirel olarak değerlendirebilir. / *Able to critically assess proposed solutions to a problem.*

- c. Hipotezleri test edebilir ve alternatifleri formüle edebilir. / *Able to test hypotheses and formulate alternatives.*
- d. Küresel sorunlara yaratıcı çözümler geliştirmek için bilimsel düşüncenin modern yöntem ve araçlarını kullanabilir. / *Able to use modern methods and tools of scientific thought in developing creative solutions for global challenges.*
- e. Bir uygulama alanında koşulları yorumlar ve formüle eder. / *Able to interpret and formulate conditions in a domain of application.*
- f. Çalışma organize eder ve projeleri planlar. / *Able to interpret and formulate conditions in a domain of application.*
- g. Problem çözme diyaloguna ve takım çalışmasına etkin bir şekilde katkıda bulunur. / *Able to contribute effectively in problem-solving dialogue and teamwork*
- h. Yaşam boyu öğrenmeye katılabilir, buna duyulan ihtiyacı tanır. / *Able to engage in life-long learning, recognizing the need for it.*
- i. İlgili kaynaklardan gelen bilgileri yorumlayabilir, değerlendirebilir ve eleştirebilir. / *Able to interpret, review, assess information from relevant sources.*
- j. Fikirleri, düşünceleri etkili bir şekilde organize edebilir ve bunları çeşitli izleyicilere iletmek için gerekli yazma ve iletişim becerilerini geliştirebilir. / *Able to develop writing and communication skills necessary to effectively organizing ideas and conveying them to various audiences.*
- k. Öğrenciler, derslerin yanı sıra çeşitli ve yaratıcı, sanatsal, kültürel, sportif ve entelektüel faaliyetlere katılarak kampüs hayatından daha fazla faydalanabilir. / *Able to take part in artistic, cultural, sportive, and intellectual activities on the campus outside the coursework, which promote diversity, creativity, and commitment.*

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

Dersler / Courses	Program Çıktıları / Program Outcomes										
	a	b	c	d	e	f	g	h	i	j	k
CS 115		✓	✓	✓	✓			✓			
ENG 101									✓	✓	✓
ENG 102									✓	✓	✓
GE 100								✓		✓	✓
GE 250								✓			✓
GE 251								✓			✓
HIST 200							✓		✓		
HUM 111									✓	✓	
HUM 112									✓	✓	
MATH 101	✓	✓					✓			✓	
MATH 102	✓	✓					✓			✓	
MATH 123	✓	✓	✓			✓			✓	✓	
MATH 124	✓		✓	✓		✓			✓	✓	
MATH 202	✓	✓	✓	✓				✓		✓	
MATH 210	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MATH 213	✓		✓	✓		✓			✓	✓	
MATH 214	✓		✓	✓		✓			✓	✓	
MATH 223	✓			✓						✓	
MATH 224	✓			✓						✓	
MATH 240	✓	✓		✓							
MATH 253	✓	✓	✓	✓					✓	✓	
MATH 323	✓										
MATH 399	✓			✓			✓		✓	✓	
MBG 110								✓			
PHYS 101	✓		✓	✓				✓		✓	
PHYS 102	✓		✓	✓				✓		✓	
TURK 101										✓	
TURK 102										✓	

Tablo.2.2. Matematik Lisans Programı - Program Çıktıları ve Dersler Tablosu / *Table.2.2. Mathematics 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 exam	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
CS 115	b	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 (%)				
	c	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 (%)				
	d	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 (%)				
	e	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 (%)				
h	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	i	20	25	8	7	10	5	25	100	M1	70	75
	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 (%)
	j	20	25	8	7	10	5	25	100	M1	70	75
	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 (%)
	k	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	i	5	20	20	10	30	15	100	M1	70	70
	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 (%)
	j	5	20	20	10	30	15	100	M1	70	70
	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 (%)
k	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	h	100	100	M1	12	80					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	j	100	100	M1	12	80					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
k	100	100	M1	12	80						
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
GE 251	h	100	100	M1	70	70					
	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	k	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	g	10	60	30	100	M1	70	75			
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	i	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	i	30	30	10	30	100	M1	50	50		
	Program Outputs	Quizzes	Course Project	In-class participation	Final Examination	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	j	30	30	10	30	100	M1	50	50		
Course Code	Program Outputs	Quizzes	In-class participation	Final:Essay/written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
HUM 112	i	30	10	30	30	100	M1	50	50		
	Program Outputs	Quizzes	In-class participation	Final:Essay/written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	j	30	10	30	30	100	M1	50	50		
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 (%)	
	g	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 (%)	
j	25	25	30	10	10	100	M1	40	50		
Course Code	Program Outputs	Midterm:Essay/written	Midterm	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	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	b	30	30	40	100	M1	40	50			

Course Code	Program Outputs	Midterm:Essay/ written	Midterm	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
MATH 102	g	30	30	40	100	M1	40	50					
	Program Outputs	Midterm:Essay/ written	Midterm	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	j	30	30	40	100	M1	40	50					
Course Code	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	
MATH 123	a	26	26	26	1	1	1	1	1	1	1	1	
		Quiz	Quiz	Quiz	Quiz	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
		1	1	1	1	1	1	1	1	1	1	1	
		Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
		1	1	1	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	
	b	26	26	26	1	1	1	1	1	1	1	1	
		Quiz	Quiz	Quiz	Quiz	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
		1	1	1	1	1	1	1	1	1	1	1	
		Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
		1	1	1	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	
	c	26	26	26	1	1	1	1	1	1	1	1	
		Quiz	Quiz	Quiz	Quiz	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
		1	1	1	1	1	1	1	1	1	1	1	
		Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
		1	1	1	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	
	f	26	26	26	1	1	1	1	1	1	1	1	
		Quiz	Quiz	Quiz	Quiz	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
1		1	1	1	1	1	1	1	1	1	1		
Homework		Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
1		1	1	100	M1	30	40						

Course Code	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	
MATH 123	i	26	26	26	1	1	1	1	1	1	1	1	
		Quiz	Quiz	Quiz	Quiz	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
		1	1	1	1	1	1	1	1	1	1	1	
		Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
		1	1	1	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	Quiz	
	j	26	26	26	1	1	1	1	1	1	1	1	
		Quiz	Quiz	Quiz	Quiz	Homework	Homework	Homework	Homework	Homework	Homework	Homework	
		1	1	1	1	1	1	1	1	1	1	1	
		Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
1		1	1	100	M1	30	40						
Course Code	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
MATH 213	a	30	30	40	100	M1	30	40					
	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	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	d	30	30	40	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	f	30	30	40	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	i	30	30	40	100	M1	30	40					
	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
j	30	30	40	100	M1	30	40						

Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
MATH 223	a	30	30	40	100	M1	30	30					
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	d	30	30	40	100	M1	30	30					
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)					
	j	30	30	40	100	M1	30	30					
Course Code	Program Outputs	Midterm:Essay/written	Final:Essay/written	Homework	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	
MATH 240	a	40	48	2	2	2	2	2	2	100	M1	30	
		Qualification Threshold (%)											
		75											
	Program Outputs	Midterm:Essay/written	Final:Essay/written	Homework	Homework	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
	b	40	48	2	2	2	2	2	2	2	100	M1	30
		Qualification Threshold (%)											
		75											
	Program Outputs	Midterm:Essay/written	Final:Essay/written	Homework	Homework	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
d	40	48	2	2	2	2	2	2	2	100	M1	30	
	Qualification Threshold (%)												
	75												
Course Code	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
MBG 110	h	5	5	5	25	30	30	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 (%)		
	c	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 101	d	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 (%)
	h	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 (%)
	j	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 (%)
	c	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 (%)
	d	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 (%)
	h	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 (%)
	j	15	20	10	10	25	20	100	M1	50	50
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 101	j	70	30	100	M1	70	60				
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
TURK 102	j	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
CS 115 - Python ile Programlamaya Giriş / CS 115 - Introduction to Programming in Python													
b	M1	40	75	351	11	69.76	70.94	346	11	98.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
c	M1	40	75	351	11	69.76	70.94	346	11	98.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	40	75	351	11	69.76	70.94	346	11	98.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	40	75	351	11	69.76	70.94	346	11	98.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
h	M1	40	75	351	11	69.76	70.94	346	11	98.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
ENG 101 - İngilizce ve Kompozisyon I / ENG 101 - English and Composition I													
i	M1	70	75	1698	26	82.20	83.89	1560	25	91.87	96.15	Yeterli ✓ / Sufficient ✓	96.15
j	M1	70	75	1698	26	82.20	83.89	1560	25	91.87	96.15	Yeterli ✓ / Sufficient ✓	96.15
k	M1	70	75	1698	26	82.20	83.89	1560	25	91.87	96.15	Yeterli ✓ / Sufficient ✓	96.15
ENG 102 - İngilizce ve Kompozisyon II / ENG 102 - English and Composition II													
i	M1	70	70	543	7	85.44	89.39	526	7	96.87	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	70	70	543	7	85.44	89.39	526	7	96.87	100.00	Yeterli ✓ / Sufficient ✓	100.00
k	M1	70	70	543	7	85.44	89.39	526	7	96.87	100.00	Yeterli ✓ / Sufficient ✓	100.00

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
GE 100 - Üniversite Hayatına Giriş / GE 100 - Orientation													
h	M1	12	80	1681	26	97.14	98.85	1681	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	12	80	1681	26	97.14	98.85	1681	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
k	M1	12	80	1681	26	97.14	98.85	1681	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
GE 251 - Üniversite Etkinlik Programı II / GE 251 - Collegiate Activities Program II													
h	M1	70	70	838	17	93.01	96.76	776	17	92.60	100.00	Yeterli ✓ / Sufficient ✓	100.00
k	M1	70	70	838	17	93.01	96.76	776	17	92.60	100.00	Yeterli ✓ / Sufficient ✓	100.00
HIST 200 - Türkiye Tarihi / HIST 200 - History of Turkey													
g	M1	70	75	1055	18	93.35	94.04	1044	18	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
i	M1	70	75	1055	18	93.35	94.04	1044	18	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / HUM 111 - Cultures Civilizations and Ideas I													
i	M1	50	50	1110	19	83.62	88.36	1110	19	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	50	50	1110	19	83.62	88.36	1110	19	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / HUM 112 - Cultures Civilizations and Ideas II													
i	M1	50	50	238	10	83.67	92.33	238	10	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	50	50	238	10	83.67	92.33	238	10	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
MATH 101 - Matematik I / MATH 101 - Calculus I													
a	M1	40	50	741	34	65.46	65.97	686	34	92.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
b	M1	40	50	741	34	65.46	65.97	686	34	92.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	40	50	741	34	65.46	65.97	686	34	92.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	40	50	741	34	65.46	65.97	686	34	92.58	100.00	Yeterli ✓ / Sufficient ✓	100.00

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
MATH 102 - Matematik II / MATH 102 - Calculus II													
a	M1	40	50	215	5	54.07	66.22	156	5	72.56	100.00	Yeterli ✓ / Sufficient ✓	100.00
b	M1	40	50	215	5	54.07	66.22	156	5	72.56	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	40	50	215	5	54.07	66.22	156	5	72.56	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	40	50	215	5	54.07	66.22	156	5	72.56	100.00	Yeterli ✓ / Sufficient ✓	100.00
MATH 123 - Soyut Matematik I / MATH 123 - Abstract Mathematics I													
a	M1	30	40	55	41	66.05	64.06	55	41	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
b	M1	30	40	55	41	66.05	64.06	55	41	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
c	M1	30	40	55	41	66.05	64.06	55	41	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
f	M1	30	40	55	41	66.05	64.06	55	41	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
i	M1	30	40	55	41	66.05	64.06	55	41	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	30	40	55	41	66.05	64.06	55	41	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
MATH 213 - İleri Matematik I / MATH 213 - Advanced Calculus I													
a	M1	30	40	40	34	40.48	38.09	27	21	67.50	61.76	Yeterli ✓ / Sufficient ✓	61.76
c	M1	30	40	40	34	40.48	38.09	27	21	67.50	61.76	Yeterli ✓ / Sufficient ✓	61.76
d	M1	30	40	40	34	40.48	38.09	27	21	67.50	61.76	Yeterli ✓ / Sufficient ✓	61.76
f	M1	30	40	40	34	40.48	38.09	27	21	67.50	61.76	Yeterli ✓ / Sufficient ✓	61.76
i	M1	30	40	40	34	40.48	38.09	27	21	67.50	61.76	Yeterli ✓ / Sufficient ✓	61.76
j	M1	30	40	40	34	40.48	38.09	27	21	67.50	61.76	Yeterli ✓ / Sufficient ✓	61.76

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
MATH 223 - Doğrusal Cebir I / MATH 223 - Linear Algebra I													
a	M1	30	30	19	15	56.33	55.35	19	15	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	30	30	19	15	56.33	55.35	19	15	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	30	30	19	15	56.33	55.35	19	15	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
MATH 240 - Türevsel Denklemler / MATH 240 - Differential Equations													
a	M1	30	75	34	18	71.85	69.70	34	18	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
b	M1	30	75	34	18	71.85	69.70	34	18	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	30	75	34	18	71.85	69.70	34	18	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
MBG 110 - Modern Biyolojiye Giriş / MBG 110 - Introduction to Modern Biology													
h	M1	50	50	450	10	64.65	62.83	345	9	76.67	90.00	Yeterli ✓ / Sufficient ✓	90.00
PHYS 101 - Genel Fizik I / PHYS 101 - General Physics I													
a	M1	50	50	663	24	68.54	64.60	598	22	90.20	91.67	Yeterli ✓ / Sufficient ✓	91.67
c	M1	50	50	663	24	68.54	64.60	598	22	90.20	91.67	Yeterli ✓ / Sufficient ✓	91.67
d	M1	50	50	663	24	68.54	64.60	598	22	90.20	91.67	Yeterli ✓ / Sufficient ✓	91.67
h	M1	50	50	663	24	68.54	64.60	598	22	90.20	91.67	Yeterli ✓ / Sufficient ✓	91.67
j	M1	50	50	663	24	68.54	64.60	598	22	90.20	91.67	Yeterli ✓ / Sufficient ✓	91.67
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	135	3	63.16	67.14	107	3	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
c	M1	50	50	135	3	63.16	67.14	107	3	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	50	50	135	3	63.16	67.14	107	3	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00

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
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
h	M1	50	50	135	3	63.16	67.14	107	3	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	50	50	135	3	63.16	67.14	107	3	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
TURK 101 - Türkçe I / TURK 101 - Turkish I													
j	M1	70	60	1516	26	87.68	87.41	1493	26	98.48	100.00	Yeterli ✓ / Sufficient ✓	100.00
TURK 102 - Türkçe II / TURK 102 - Turkish II													
j	M1	70	60	492	6	90.84	91.09	487	6	98.98	100.00	Yeterli ✓ / Sufficient ✓	100.00

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	i	j	k
CS 115		✓	✓	✓	✓			✓			
ENG 101									✓	✓	✓
ENG 102									✓	✓	✓
GE 100								✓		✓	✓
GE 251								✓			✓
HIST 200							✓		✓		
HUM 111									✓	✓	
HUM 112									✓	✓	
MATH 101	✓	✓					✓			✓	
MATH 102	✓	✓					✓			✓	
MATH 123	✓	✓	✓			✓			✓	✓	
MATH 213	✓		✓	✓		✓			✓	✓	
MATH 223	✓			✓						✓	
MATH 240	✓	✓		✓							
MBG 110								✓			
PHYS 101	✓		✓	✓				✓		✓	
PHYS 102	✓		✓	✓				✓		✓	
TURK 101										✓	
TURK 102										✓	

Tablo.3.3.1. 2023-2024 Akademik Yılı Güz Dönemi Matematik Lisans Programı Program Çıktıları Performans Tablosu *Table.3.3.1. 2023-2024 Academic Year Fall Semester Mathematics 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	i	j	k
CS 115		100.00	100.00	100.00	100.00			100.00			
ENG 101									96.15	96.15	96.15
ENG 102									100.00	100.00	100.00
GE 100								100.00		100.00	100.00
GE 251								100.00			100.00
HIST 200							100.00		100.00		
HUM 111									100.00	100.00	
HUM 112									100.00	100.00	
MATH 101	100.00	100.00					100.00			100.00	
MATH 102	100.00	100.00					100.00			100.00	
MATH 123	100.00	100.00	100.00			100.00			100.00	100.00	
MATH 213	61.76		61.76	61.76		61.76			61.76	61.76	
MATH 223	100.00			100.00						100.00	
MATH 240	100.00	100.00		100.00							
MBG 110								90.00			
PHYS 101	91.67		91.67	91.67				91.67		91.67	
PHYS 102	100.00		100.00	100.00				100.00		100.00	
TURK 101										100.00	
TURK 102										100.00	

Tablo.3.3.2. 2023-2024 Akademik Yılı Güz Dönemi Matematik Lisans Programı Program Çıktıları Performans Oranları Tablosu / **Table.3.3.2.** 2023-2024 Academic Year Fall Semester Mathematics Undergraduate Program - Program Outcomes Performance Rates Table