

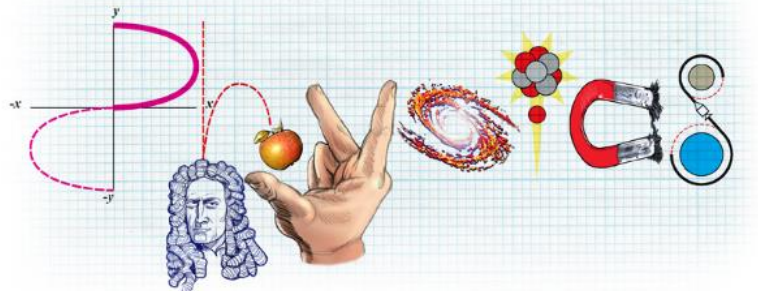
2023-2024 AKADEMİK YILI /
Academic Year

EĞİTİMDE KALİTE GÜVENCESİ YILLIK RAPORU

*QUALITY ASSURANCE IN
EDUCATION ANNUAL REPORT*

FEN FAKÜLTESİ
FACULTY OF SCIENCES

FİZİK LİSANS PROGRAMI (PHYS)
PHYSICS UNDERGRADUATE PROGRAM (PHYS)



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FEN FAKÜLTESİ / FACULTY OF SCIENCES
FİZİK LİSANS PROGRAMI - PHYS / PHYSICS
UNDERGRADUATE PROGRAM - PHYS

1. BÖLÜM HAKKINDA / ABOUT THE DEPARTMENT

1.1. EĞİTİM AMAÇLARI / EDUCATIONAL OBJECTIVES

Programın mezunlarının mezuniyetlerinden sonra birkaç yıl içinde aşağıdaki programın eğitim amaçlarından bir veya daha fazlasına ulaşması beklenir: / *Graduates of the program are expected to attain or achieve one or more of the following program educational objectives within a few years of graduation:*

- PEO1: Fizik mezunları, kariyerlerinde akademik veya endüstriyel ortamlarda önde gelen araştırmacılar olarak ayırt edilecektir. / *PEO1: PHYS graduates will be distinguished in their careers as prominent researchers in academic or industrial settings.*
- PEO2: Fizik mezunları, çeşitli alanlardaki karmaşık sorunları çözmek için analitik düşünme becerilerini ve teknik uzmanlıklarını uygulayacaklardır. / *PEO2: PHYS graduates will apply their analytical thinking skills and technical expertise to solve complex problems in various fields.*
- PEO3: Fizik mezunları, ellerindeki problemle ilgili bilgi seviyelerini değerlendirecek ve bilgi ve becerilerini geliştirmek için yaşam boyu öğrenmeye katılacaklardır. / *PEO3: PHYS graduates will assess their level of information related to their problems and engage in lifelong learning to improve their knowledge and skills.*
- PEO4: Fizik mezunları, temel bilim ve / veya teknolojiye katkıda bulunarak yüksek lisans dereceleri (Yüksek Lisans ve Doktora) alacaklardır. / *PEO4: PHYS graduates will obtain graduate degrees (M.S. and Ph.D) by contributing to basic science and/or technology.*

1.1.1. DANIŞMA KURULU / ADVISORY BOARD

- Prof.Dr. Alpan Bek, Öğretim Üyesi, Orta Doğu Teknik Üniversitesi / *Prof. Dr. Alpan Bek, Faculty Member, Middle East Technical University*
- Prof.Dr. Mete Atatüre, Öğretim Üyesi, Cambridge Üniversitesi, Birleşik Krallık / *Prof. Dr. Mete Atatüre, Faculty Member, Cambridge University, United Kingdom*
- Doç. Dr. Cem Sevik, Öğretim Üyesi, Eskişehir Teknik Üniversitesi / *Assoc. Dr. Cem Sevik, Faculty Member, Eskişehir Technical University*
- Doç. Dr. Hümevra Çağlayan, Öğretim Üyesi, Tampere Teknoloji Üniversitesi, Finlandiya / *Assoc. Dr. Hümevra Çağlayan, Faculty Member, Tampere University of Technology, Finland*
- Dr. Erkan Tekman, Öğretim Görevlisi, Koç Üniversitesi / *Dr. Erkan Tekman, Faculty Member, Koç University*
- Ozan Yerli, CEO, Connected2.me / *Ozan Yerli, CEO, Connected2.me*

1.2. LİSANS PROGRAMI / UNDERGRADUATE PROGRAM

1.2.1. MÜFREDAT / CURRICULUM

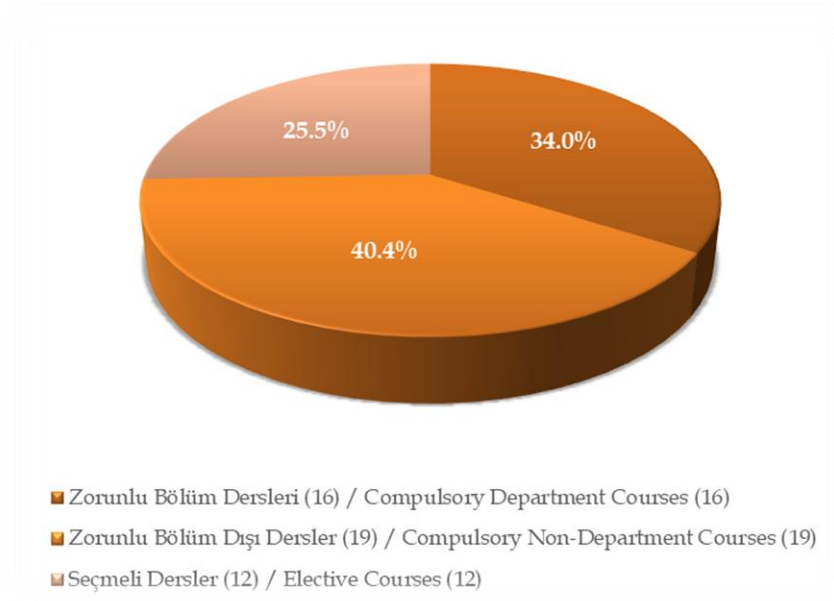
Birinci Yıl / First Year					
Güz Dönemi / Fall Semester					
Ders Kod / Course Code	Ders Adı / Course Name	Saatler / Hours		Kredi / Credits	
		Ders / Lecture	Lab / Stüdyo / Diğer / Lab / Studio / Others	Bilkent	ECTS
CHEM 101	Kimyanın Temelleri I / Principles of Chemistry I	3	4	4	6.5
ENG 101	İngilizce 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
PHYS 101	Genel Fizik I / General Physics I	3	3	4	6.5
PHYS 120	Fizik Öğrencileri İçin Üniversite Hayatına Giriş / Orientation for Physics Majors	1	0	1	2
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
CS 115	Python ile Programlamaya Giriş / Introduction to Programming in Python	3	4	4	6.5
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
PHYS 102	Genel Fizik II / General Physics II	4	0	4	6.5
PHYS 124	Proje / Freshman Project	1	3	2	3.5
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
CHEM 201	Malzeme Bilimi ve Teknolojisi / <i>Materials Science and Technology</i>	3	0	3	5
GE 250	Üniversite Etkinlik Programı I / <i>Collegiate Activities Program I</i>	0	0	0	1
HIST 200	Türkiye Tarihi / <i>History of Turkey</i>	3	0	4	6.5
MATH 241	Mühendislik Matematiği I / <i>Engineering Mathematics I</i>	4	0	4	6.5
MBG 110	Modern Biyolojiye Giriş / <i>Introduction to Modern Biology</i>	3	0	3	5
PHYS 211	Dalgalar, Optik ve Termodinamik / <i>Waves, Optics and Thermodynamics</i>	3	0	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
GE 251	Üniversite Etkinlik Programı II / <i>Collegiate Activities Program II</i>	0	0	1	2
MATH 242	Mühendislik Matematiği II / <i>Engineering Mathematics II</i>	4	0	4	6.5
PHYS 212	Modern Fizik / <input type="checkbox"/> <i>Modern Physics</i>	3	0	4	6.5
PHYS 218	Analitik Mekanik / <i>Analytical Mechanics</i>	3	0	3	5
PHYS 242	Fizik Uygulamaları İçin İleri Matematik / <i>Advanced Calculus for Applications in Physics</i>	3	0	3	5
	Seçmeli Ders / <i>Elective</i>			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 / <i>Professional Communication</i>	3	0	3	5
HUM 111	Kültürler, Medeniyetler ve Düşünceler I / <i>Cultures Civilizations and Ideas I</i>	3	0	3	5
PHYS 291	Yaz Stajı / <i>Summer Practice</i>	0	0	0	7
PHYS 315	Elektromanyetik Teori I / <i>Electromagnetic Theory I</i>	3	0	3	5
PHYS 325	Kuantum Mekaniği I / <i>Quantum Mechanics I</i>	3	0	3	5
PHYS 371	Fizikte Sayısal Yöntemler / <i>Numerical Methods in Physics</i>	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
HUM 112	Kültürler, Medeniyetler ve Düşünceler II / <i>Cultures Civilizations and Ideas II</i>	3	0	3	5
PHYS 334	İstatistiksel Fizik / <i>Statistical Physics</i>	3	0	3	5
PHYS 374	Fiziğin Deneysel Yöntemleri / <i>Experimental Methods of Physics</i>	3	3	4	6.5
	Seçmeli Ders / <i>Elective</i>			3	
	Fizik Seçmeli Dersi / <i>Physics 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
PHYS 491	Bitirme Projesi I / Senior Project I	0	4	4	6,5
	Seçmeli Ders / Elective			3	
	Fizik Seçmeli Dersi / Physics Elective			3	
	Temel Sosyal Bilimler Seçmeli Dersi / Social Science Core Elective			3	
	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
PHYS 492	Bitirme Projesi II / Senior Project II	0	4	4	6,5
	Temel Sanat Seçmeli Dersi / Arts Core Elective			3	
	Seçmeli Ders / Elective			3	
	Fizik Seçmeli Dersi / Physics Elective			3	
	Teknik Seçmeli Ders (2) / Technical Elective (2)			6	

1.2.2. DERSLERİN DAĞILIMI / DISTRIBUTION COURSES



Grafik.1.2.2. Fizik Lisans Programı Müfredatındaki Derslerin Dağılımı / *Graphic.1.2.2. Distribution of Courses in the Physics Undergraduate Program Curriculum*

1.3. ÖĞRENCİLER / STUDENTS

1.3.1. ÖĞRENCİ SAYILARI / NUMBER OF STUDENTS

Öğrenci Sayıları / Number of Students	
Hazırlık / <i>Prep</i>	12
1. Sınıf / <i>1. Class</i>	34
2. Sınıf / <i>2. Class</i>	34
3. Sınıf / <i>3. Class</i>	38
4. Sınıf / <i>4. Class</i>	35
Toplam Öğrenci Sayısı / Total Number of Students	153

Tablo.1.3.1. 2023-2024 Akademik Yılı Fizik Lisans Programı Öğrenci Sayıları / **Table.1.3.1.**
Number of Students in Physics Undergraduate Program for the 2023-2024 Academic Year

1.3.2. YABANCI ÖĞRENCİ SAYILARI / NUMBER OF FOREIGN STUDENTS

Yabancı Öğrenci Sayıları / Number of Foreign Students	
1. Sınıf / <i>1. Class</i>	2
2. Sınıf / <i>2. Class</i>	1
3. Sınıf / <i>3. Class</i>	2
4. Sınıf / <i>4. Class</i>	5
Toplam Yabancı Öğrenci Sayısı / Total Number of Foreign Students	10

Tablo.1.3.2. 2023-2024 Akademik Yılı Fizik Lisans Programı Yabancı Öğrenci Sayıları /
Table.1.3.2. *Number of Foreign Students in Physics Undergraduate Program for the 2023-2024 Academic Year*

1.4. ÖĞRETİM ELEMANLARI / FACULTY MEMBERS

1.4.1. ÖĞRETİM ELEMANI SAYILARI / NUMBER OF FACULTY MEMBERS

Öğretim Elemanı Sayıları / Number of Faculty Members	
Profesör Doktor / <i>Professor Doctor</i>	10
Doktor Öğretim Üyesi / <i>Asisstant Professor</i>	5
Öğretim Görevlisi / <i>Instructor</i>	3
Toplam Öğretim Elemanı Sayısı / Total Number of Faculty Members	18

Tablo.1.4.1. 2023-2024 Akademik Yılında Fizik Lisans Programı Kadrolu ve Yarı Zamanlı Öğretim Elemanı Sayıları / **Table.1.4.1.** Number of Full-Time and Part-Time Faculty Members in the Physics Undergraduate Program in the 2023-2024 Academic Year

1.4.2. ÖĞRETİM ELEMANLARININ LİSTESİ / LIST OF FACULTY MEMBERS

Öğretim Elemanının Unvanı / Title of Faculty Member	Öğretim Elemanının Çalışma Şekli / Work-mode of Faculty Member	Öğretim Elemanının Adı - Soyadı / Name-Surname of Faculty Member
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Onur Tokel
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Şahin Büyükdaglı
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Deniz Aybaş Tümtürk
Doktor Öğretim Üyesi / Assistant Professor	Tam Zamanlı / Full Time	Emre Ozan Polat
Doktor Öğretim Üyesi / Assistant Professor	Yarı Zamanlı / Part Time	Özgür Baştürk
Öğretim Görevlisi / Instructor	Tam Zamanlı / Full Time	Ahmet Züfer Eriş
Öğretim Görevlisi / Instructor	Tam Zamanlı / Full Time	Ceren Sibel Sayın
Öğretim Görevlisi / Instructor	Yarı Zamanlı / Part Time	Zeynep Ergönerç Yavaş
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Haldun Sevinçli
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Bilal Tanatar
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Ekmel Özbay
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Ceyhun Bulutay
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Mehmet Cemal Yalabık
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Oğuz Gülseren
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Mehmet Özgür Oktel
Profesör Doktor / Professor Doctor	Tam Zamanlı / Full Time	Hilmi Volkan Demir
Profesör Doktor / Professor Doctor	Yarı Zamanlı / Part Time	Yiğit Gündüç
Profesör Doktor / Professor Doctor	Yarı Zamanlı / Part Time	Ali Ulvi Yılmaz

Tablo.1.4.2. 2023-2024 Akademik Yılında Fizik Lisans Programı Kadrolu ve Yarı Zamanlı Öğretim Elemanı Listesi / **Table.1.4.2.** List of Full-Time and Part-Time Faculty Members in the Physics Undergraduate Program in the 2023-2024 Academic Year

1.5. EĞİTİMDE KALİTE KOMİTESİ / COMMITTEE OF QUALITY IN EDUCATION

❖ Ceyhun Bulutay

❖ Mehmet Özgür Oktel

2. TÜRKİYE YÜKSEKÖĞRETİM YETERLİLİKLER ÇERÇEVESİ - ULUSAL YETERLİLİKLER / *TURKISH HIGHER EDUCATION QUALIFICATIONS FRAMEWORK - NATIONAL QUALIFICATIONS*

Natural Sciences Basic Field Qualifications (Academic Weighted) - 6th Level - Bachelor's						
LEVEL OF THEQF	KNOWLEDGE SKILLS -Theoretical -Factual	SKILLS -Cognitive -Practical	COMPETENCIES			
			Ability to Work Independently and Take Responsibility	Learning Competence	Communication and Social Competence	Field-Specific Competence
6th Level Bachelor's	K1. Having advanced theoretical and practical knowledge that emphasizes scientific approach supported by course books, practice tools and other resources containing current information in the field.	S1. Adapting and transferring the field knowledge to secondary education.	W1. Running an upper level study independently in the field.	L1. Critically evaluating the advanced knowledge and skills acquired in the field.	C1. Informing the related persons and organizations in subjects regarding the field and expressing opinions and proposals for solutions to the problems orally and in a written way.	F1. Following social, scientific, cultural and ethical values in gathering, commenting on and applying data in the field and announcing the results.
EQF-LLL: 6th Level		S2. Using advanced theoretical and practical knowledge in the field.	W2. Taking responsibility individually and as a group member to solve unpredicted complicated problems occurring in field practices.	L2. Determining learning needs and redirecting education.	C2. Sharing the opinions and solutions to problems supported by quantitative and qualitative data on subjects related to the field with experts and others.	F2. Having sufficient awareness on universality of social rights, social justice, complying with and participating in quality management and processes (instead of quality culture), protecting cultural values and environment, occupational health and security.
QF-EHEA: 1st Cycle		S3. Renewing the knowledge depending on the actual circumstances.	W3. Planning and managing the activities for the improvement of the workers under one's responsibility within a project framework.	L3. Developing positive attitude towards lifelong learning.	C3. Arranging and implementing projects and activities for the society with respect to	
		S4. Commenting on and assessing data using the advanced knowledge and skills acquired in the field; defining, analyzing and bring solutions to the problems parallel to the actual technologic developments based on evidence.		L4. Having the awareness for the necessity of lifelong learning and constantly		
		S5. Having the skills to conceptualize the events and facts				

		<p>in the field; examining them with scientific methods and technics.</p> <p>S6. Designing and realizing experiments, gathering data, analyzing and commenting on the results for the investigation of problems.</p>	<p>W4. Taking part in decision making processes for problems in different discipline areas.</p> <p>W5. Using time effectively in achieving results through analytic thinking skills.</p>	<p>developing professional knowledge and skills.</p>	<p>social responsibility awareness.</p> <p>C4. Keeping track of the developments in the field and communicating with colleagues by speaking a foreign language at least on European Language Portfolio B1general level.</p> <p>C5. Using informatics and communication technologies together with computer software required by the field at least at European Computer Driving License advanced level.</p> <p>C6. Using the field knowledge on human health and environmental awareness for the benefit of the society.</p>	
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3. PROGRAM ÇIKTILARI / PROGRAM OUTCOMES

3.1. PROGRAM ÇIKTILARININ LİSTESİ / LIST OF PROGRAM OUTCOMES

- a. Verilen bir problemle ilgili evrensel fiziksel yasaları tanır, bu yasaları matematiksel ve sayısal tekniklerle uygular. / *Recognize universal physical laws relevant to a given problem, apply these laws through mathematical and computational techniques.*

- b.** Bilimsel bilginin kaynağını, güvenilirliğini ve geçerlilik sınırlarını eleştirel olarak değerlendirir. / *Critically assess the source, reliability and limits of validity of scientific knowledge.*
- c.** Deneyleri tasarlamak, yürütmek ve analiz etmek için bilimsel yöntemi kullanır. / *Use the scientific method to design, execute and analyze experiments.*
- d.** Teknolojik kaynakları ve analitik düşünmeyi uygun zaman yönetimi ile kullanarak problem çözme yeteneğini gösterir. / *Demonstrate problem solving ability using technological resources and analytical thinking with proper time management.*
- e.** Fikirleri, düşünceleri etkili bir şekilde organize edebilir ve bunları çeşitli izleyicilere iletme için gerekli yazma ve iletişim becerilerini geliştirebilir. / *Develop writing and communication skills necessary to effectively organize ideas and thoughts, and to convey them to various audiences.*
- f.** Disiplinlerarası çalışmalarda hem bireysel hem de takım üyesi olarak etkin bir şekilde kararlar alır. / *Participate efficiently in interdisciplinary work, taking decisions both individually and as a group member.*
- g.** Fiziğin küresel, toplumsal, ekonomik ve çevresel etkilerini tanımlar. / *Identify the global impact of physics in societal, economic and environmental contexts.*
- h.** Mevcut bilgi durumunu değerlendirir ve spesifik hedefler için yeni bilgi edinme planını iyileştirir. / *Evaluate current state of knowledge and refine a plan to acquire new knowledge for specific goals.*
- i.** Mesleki ve etik sorumluluğu, iş sağlığı ve işyeri güvenliğini göz önünde bulundurur. / *Demonstrate professional and ethical responsibility, value occupational health and workplace safety.*
- j.** Öğrenciler, derslerin yanı sıra çeşitli ve yaratıcı, sanatsal, kültürel, sportif ve entelektüel faaliyetlere katılarak kampüs hayatından daha fazla faydalanırlar. / *Take advantage of the campus life where students are engaged in diversity, creativity, and commitment outside coursework through artistic, cultural, sportive, and intellectual activities.*

3.2. ULUSAL YETERLİLİKLER İLE PROGRAM ÇIKTILARI BAĞLANTI TABLOSU / NATIONAL QUALIFICATIONS AND PROGRAM OUTCOMES CONNECTION TABLE

Ulusal Yeterlilikler / National Competencies	Program Çıktıları / Program Outcomes									
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
K1	✓	✓	✓	✓						
S1		✓	✓					✓		
S2	✓		✓					✓		
S3								✓	✓	
S4		✓		✓	✓					
S5	✓		✓							
S6		✓		✓						
W1				✓		✓			✓	
W2						✓			✓	
W3				✓	✓	✓				✓
W4						✓		✓		
W5				✓						
L1	✓	✓								
L2							✓	✓		
L3								✓		
L4							✓	✓	✓	
C1					✓					
C2		✓			✓					
C3				✓			✓			✓
C4					✓				✓	
C5	✓			✓						
C6							✓		✓	
F1					✓		✓		✓	✓
F2							✓		✓	✓

Tablo.3.2. Ulusal Yeterlilikler ile Fizik Lisans Programı Program Çıktıları Bağlantı Tablosu / *Table.3.2. National Qualifications and Physics Undergraduate Program Program Outcomes Link Table*

4. DERSLER / COURSES

4.1. PROGRAM ÇIKTILARI - DERSLER TABLOSU / PROGRAM OUTCOMES - COURSES TABLE

Dersler / Courses	Program Çıktıları / Program Outcomes										Dersler / Courses	Program Çıktıları / Program Outcomes									
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
CHEM 101	✓	✓	✓								PHYS 102	✓	✓			✓					
CHEM 201	✓		✓								PHYS 120			✓						✓	
COMD 358					✓	✓				✓	PHYS 124		✓		✓	✓					
CS 115				✓							PHYS 211	✓		✓							
ENG 101					✓						PHYS 212	✓		✓				✓			
ENG 102					✓						PHYS 218	✓		✓	✓						
GE 100								✓		✓	PHYS 242	✓									
GE 250						✓	✓			✓	PHYS 291					✓		✓		✓	
GE 251										✓	PHYS 315	✓		✓							
HIST 200					✓	✓					PHYS 325	✓		✓							
HUM 111				✓	✓						PHYS 334	✓									
HUM 112				✓	✓						PHYS 371			✓	✓	✓					
MATH 101	✓	✓		✓							PHYS 374		✓		✓	✓	✓		✓		
MATH 102	✓	✓		✓							PHYS 491		✓	✓	✓	✓					
MATH 241	✓			✓							PHYS 492		✓	✓	✓	✓					
MATH 242	✓			✓							TURK 101					✓		✓			
MBG 110		✓					✓				TURK 102	✓						✓			
PHYS 101	✓	✓			✓																

Tablo.4.1. Fizik Lisans Programı Program Çıktılarının Müfredat Dersleri ile Eşleşme Tablosu / **Table.4.1.** Physics Undergraduate Program - Program Outcomes and Courses Table

4.2. PERFORMANS ÖLÇÜMÜNDE KULLANILAN METRİKLER / METRICS TO BE USED IN PERFORMANCE MEASUREMENT

4.2.1. PERFORMANS ÖLÇÜMLERİNDE KULLANILAN DEĞERLENDİRME METOTLARI // EVALUATION METHODS USED IN PERFORMANCE MEASUREMENTS

4.2.1.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

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			
	Program Outputs	Lab work	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade			
	c	50	50	100	M3	50	(Average) Qualification Grade	Qualification Threshold (%)	
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	50	70	
	a	30	30	40	100	M1	(Average) Qualification Grade	Qualification Threshold (%)	
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Total Contribution	Qualification Calculation Method	50	70	
c	30	30	40	100	M1	50	70		

Course Code	Program Outputs	Homeworks	Homeworks	Homeworks	Homeworks	Homeworks	In-class assignments	In-class assignments	In-class assignments	In-class assignments	In-class assignments	Exam
COMD 358	e	5	5	5	5	5	5	5	5	5	5	25
		Project & Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
		25	100	M1	60	70						
	Program Outputs	Homeworks	Homeworks	Homeworks	Homeworks	Homeworks	In-class assignments	In-class assignments	In-class assignments	In-class assignments	In-class assignments	Exam
	f	5	5	5	5	5	5	5	5	5	5	25
		Project & Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
		25	100	M1	60	70						
	Program Outputs	Homeworks	Homeworks	Homeworks	Homeworks	Homeworks	In-class assignments	In-class assignments	In-class assignments	In-class assignments	In-class assignments	Exam
	i	5	5	5	5	5	5	5	5	5	5	25
		Project & Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
		25	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	d	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	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						
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
GE 251	j	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	e	10	60	30	100	M1	70	75				
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	f	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	d	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 (%)			
	e	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	d	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 (%)			
	e	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 (%)		
	d	25	25	30	10	10	100	M1	40	50		
Course Code	Program Outputs	Midterm:Essay/ written	Midterm	Final:Essay/ written	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
MATH 102	a	25	25	30	10	10	100	M1	40	50		
	Program Outputs	Midterm:Essay/ written	Midterm	Final:Essay/ written	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:Essay/ written	Midterm	Final:Essay/ written	Quiz	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	d	25	25	30	10	10	100	M1	40	50		
Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MATH 241	a	35	35	6	6	6	6	6	100	M1	25	75
	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	d	35	35	6	6	6	6	6	100	M1	25	75

Course Code	Program Outputs	Midterm:Essay/ written	Quiz	Homework	Final:Essay /written	MATLAB	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MATH 242	a	30	30	5	30	5	100	M1	30	75	
	Program Outputs	Midterm:Essay/ written	Quiz	Homework	Final:Essay/ written	MATLAB	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	d	30	30	5	30	5	100	M1	30	75	
Course Code	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
MBG 110	b	5	5	5	25	30	30	100	M1	50	50
	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	g	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 (%)
	b	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 (%)
	b	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	In-class attendance	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
PHYS 120	c	50	50	100	M1	50	50			
	Program Outputs	In-class attendance	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	i	50	50	100	M1	50	50			
Course Code	Program Outputs	Final:Essay/written	Midterm:Essay/written	Project	Homework	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 211	a	25	20	30	10	15	100	M1	50	50
	Program Outputs	Final:Essay/written	Midterm:Essay/written	Project	Homework	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	25	20	30	10	15	100	M1	50	50
Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Homework	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
PHYS 315	a	25	25	15	35	100	M1	50	50	
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Homework	Final:Essay/written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	c	25	25	15	35	100	M1	50	50	
Course Code	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
PHYS 325	a	25	25	35	15	100	M1	50	50	
	Program Outputs	Midterm:Essay/written	Midterm:Essay/written	Final:Essay/written	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	c	25	25	35	15	100	M1	50	50	
Course Code	Program Outputs	Quiz	Project	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
PHYS 371	c	15	35	50	100	M1	50	50		
	Program Outputs	Quiz	Project	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	d	15	35	50	100	M1	50	50		
	Program Outputs	Quiz	Project	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	e	15	35	50	100	M1	50	50		

Course Code	Program Outputs	Papers(s)/ Reports	Presentations	Papers(s)/ Reports	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 491	b	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Presentations	Papers(s)/ Reports	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Presentations	Papers(s)/ Reports	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	d	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Presentations	Papers(s)/ Reports	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
e	20	40	40	100	M1	50	50	
Course Code	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 492	b	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	d	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
e	20	40	40	100	M1	50	50	
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
TURK 101	e	70	30	100	M1	70	60	
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	h	70	30	100	M1	70	60	

Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
TURK 102	a	70	30	100	M1	70	60
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	h	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 dönem toplamlarının en az G olması / *M1: T% of the students to have a semester total of at least G*
- M2: Öğrencilerin %T'sinin dönem toplamlarının en az bölümdeki dönem toplamlarının ortalaması kadar olması / *M2: T% of the students of the department to have a semester total of at least that of the department average*
- M3: Öğrencilerin dönem toplamlarının ortalamasının en az G olması / *M3: Average semester total of students of the department to be at least G*
- M4: Öğrencilerin %T'sinin dönem toplamlarının en az tüm bölümlerdeki tüm öğrencilerin dönem toplamlarının ortalaması kadar olması / *M4: T% of the students of the department to have a semester total of at least average semester total of all students from all departments*

4.2.1.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

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
	Program Outputs	Lab work	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade
c	50	50	100	M3	50	

Course Code	Program Outputs	Midterm:Essay/ written	Midterm:Essay/ written	Final:Essay/ written	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
CHEM 201	a	30	30	40	100	M1	50	70
	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	50	70

Course Code	Program Outputs	Homework	Homework	Homework	Homework	Midterm	Project	Term project	Presentations	In-class participation	Total Contribution	Qualification Calculation Method	
COMD 358	e	5	5	5	5	25	30	10	10	5	100	M1	
		(Average) Qualification Grade	Qualification Threshold (%)										
		60	70										
	Program Outputs	Homework	Homework	Homework	Homework	Midterm	Project	Term project	Presentations	In-class participation	Total Contribution	Qualification Calculation Method	
	f	5	5	5	5	25	30	10	10	5	100	M1	
		(Average) Qualification Grade	Qualification Threshold (%)										
60		70											

Course Code	Program Outputs	Homework	Homework	Homework	Homework	Midterm	Project	Term project	Presentations	In-class participation	Total Contribution	Qualification Calculation Method	
COMD 358	i	5	5	5	5	25	30	10	10	5	100	M1	
		(Average) Qualification Grade	Qualification Threshold (%)										
		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	d	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	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							
Course Code	Program Outputs	In-class participation	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)							
GE 251	j	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	e	10	60	30	100	M1	70	75			
	Program Outputs	Oral presentation	Research essay	Performance	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	f	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	d	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 (%)		
	e	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	d	30	10	30	30	100	M1	50	75		
	Program Outputs	Quizzes	In-class participation	Final:Essay/written	Project	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	e	30	10	30	30	100	M1	50	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 (%)	
	d	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 (%)					
d	30	30	40	100	M1	40	50						
Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
MATH 241	a	35	35	6	6	6	6	6	100	M1	25	75	
	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Quiz	Quiz	Quiz	Quiz	Quiz	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	d	35	35	6	6	6	6	6	100	M1	25	75	
Course Code	Program Outputs	Midterm:Essay/ written	Quiz	Homework	Final:Essay/ written	MATLAB	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
MATH 242	a	30	30	5	30	5	100	M1	30	75			
	Program Outputs	Midterm:Essay/ written	Quiz	Homework	Final:Essay/ written	MATLAB	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	d	30	30	5	30	5	100	M1	30	75			
Course Code	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
MBG 110	b	5	5	5	25	30	30	100	M1	50	50		
	Program Outputs	Quiz	Quiz	Quiz	Midterm	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)		
	g	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 (%)
	b	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 (%)
	b	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	Homework	Term project	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
PHYS 124	b	40	40	20	100	M1	50	50			
	Program Outputs	Homework	Term project	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	d	40	40	20	100	M1	50	50			
	Program Outputs	Homework	Term project	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)			
	e	40	40	20	100	M1	50	50			

Course Code	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Term project	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
PHYS 212	a	25	25	30	20	100	M1	50	50				
	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Term project	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	c	25	25	30	20	100	M1	50	50				
	Program Outputs	Midterm:Essay/ written	Final:Essay/ written	Term project	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	g	25	25	30	20	100	M1	50	50				
Course Code	Program Outputs	Midterm	Midterm	Final	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
PHYS 218	a	25	25	35	15	100	M1	50	50				
	Program Outputs	Midterm	Midterm	Final	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	c	25	25	35	15	100	M1	50	50				
	Program Outputs	Midterm	Midterm	Final	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)				
	d	25	25	35	15	100	M1	50	50				
Course Code	Program Outputs	Midterm	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)						
PHYS 242	a	50	50	100	M1	50	50						
Course Code	Program Outputs	Midterm	Midterm	Final	Homework	Homework	Homework	Homework	Homework	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	
PHYS 334	a	20	20	35	5	5	5	5	5	100	M1	50	
		Qualification Threshold (%)											
		50											

Course Code	Program Outputs	Quiz	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
PHYS 374	b	10	90	100	M1	50	50	
	Program Outputs	Quiz	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	d	10	90	100	M1	50	50	
	Program Outputs	Quiz	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	e	10	90	100	M1	50	50	
	Program Outputs	Quiz	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	f	10	90	100	M1	50	50	
	Program Outputs	Quiz	Lab work	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
h	10	90	100	M1	50	50		
Course Code	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
PHYS 492	b	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	c	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	d	20	40	40	100	M1	50	50
	Program Outputs	Papers(s)/ Reports	Papers(s)/ Reports	Presentations	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	e	20	40	40	100	M1	50	50
Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
TURK 101	e	70	30	100	M1	70	60	
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)	
	h	70	30	100	M1	70	60	

Course Code	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
TURK 102	a	70	30	100	M1	70	60
	Program Outputs	Blog	Final	Total Contribution	Qualification Calculation Method	(Average) Qualification Grade	Qualification Threshold (%)
	h	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 dönem toplamlarının en az G olması / *M1: T% of the students to have a semester total of at least G*
- M2: Öğrencilerin %T'sinin dönem toplamlarının en az bölümdeki dönem toplamlarının ortalaması kadar olması / *M2: T% of the students of the department to have a semester total of at least that of the department average*
- M3: Öğrencilerin dönem toplamlarının ortalamasının en az G olması / *M3: Average semester total of students of the department to be at least G*
- M4: Öğrencilerin %T'sinin dönem toplamlarının en az tüm bölümlerdeki tüm öğrencilerin dönem toplamlarının ortalaması kadar olması / *M4: T% of the students of the department to have a semester total of at least average semester total of all students from all departments*

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

4.2.2.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

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
CHEM 101 - Kimyannın Temelleri I / CHEM 101 - Principles of Chemistry I													
a	M3	50		82	21	74.50	75.39	82	21	100.00	100.00	Yeterli ✓ / Sufficient ✓	75.39
b	M3	50		82	21	74.50	75.39	82	21	100.00	100.00	Yeterli ✓ / Sufficient ✓	75.39
c	M3	50		82	21	74.50	75.39	82	21	100.00	100.00	Yeterli ✓ / Sufficient ✓	75.39
CHEM 201 - Malzeme Bilimi ve Teknolojisi / CHEM 201 - Materials Science and Technology													
a	M1	50	70	125	27	61.44	64.22	93	21	74.40	77.78	Yeterli ✓ / Sufficient ✓	77.78
c	M1	50	70	125	27	61.44	64.22	93	21	74.40	77.78	Yeterli ✓ / Sufficient ✓	77.78
COMD 358 - Profesyonel İletişim / COMD 358 - Professional Communication													
e	M1	60	70	400	18	83.62	85.41	398	18	99.50	100.00	Yeterli ✓ / Sufficient ✓	100.00
f	M1	60	70	400	18	83.62	85.41	398	18	99.50	100.00	Yeterli ✓ / Sufficient ✓	100.00
i	M1	60	70	400	18	83.62	85.41	398	18	99.50	100.00	Yeterli ✓ / Sufficient ✓	100.00
CS 115 - Python ile Programlamaya Giriş / CS 115 - Introduction to Programming in Python													
d	M1	40	75	351	9	69.76	73.25	346	9	98.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
ENG 101 - İngilizce ve Kompozisyon I / ENG 101 - English and Composition I													
e	M1	70	75	1698	19	82.20	86.88	1560	19	91.87	100.00	Yeterli ✓ / Sufficient ✓	100.00
ENG 102 - İngilizce ve Kompozisyon II / ENG 102 - English and Composition II													
e	M1	70	70	543	9	85.44	89.44	526	9	96.87	100.00	Yeterli ✓ / Sufficient ✓	100.00
GE 100 - Üniversite Hayatına Giriş / GE 100 - Orientation													
h	M1	12	80	1681	24	97.14	97.29	1681	24	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
j	M1	12	80	1681	24	97.14	97.29	1681	24	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00

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
GE 251 - Üniversite Etkinlik Programı II / GE 251 - Collegiate Activities Program II													
j	M1	70	70	838	11	93.01	91.82	776	9	92.60	81.82	Yeterli ✓ / Sufficient ✓	81.82
HIST 200 - Türkiye Tarihi / HIST 200 - History of Turkey													
e	M1	70	75	1055	16	93.35	93.21	1044	16	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
f	M1	70	75	1055	16	93.35	93.21	1044	16	98.96	100.00	Yeterli ✓ / Sufficient ✓	100.00
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / HUM 111 - Cultures Civilizations and Ideas I													
d	M1	60	75	1110	16	83.62	91.84	1099	16	99.01	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	60	75	1110	16	83.62	91.84	1099	16	99.01	100.00	Yeterli ✓ / Sufficient ✓	100.00
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / HUM 112 - Cultures Civilizations and Ideas II													
d	M1	60	75	238	6	83.67	80.91	237	6	99.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	60	75	238	6	83.67	80.91	237	6	99.58	100.00	Yeterli ✓ / Sufficient ✓	100.00
MATH 101 - Matematik I / MATH 101 - Calculus I													
a	M1	40	50	741	28	65.46	68.72	686	27	92.58	96.43	Yeterli ✓ / Sufficient ✓	96.43
b	M1	40	50	741	28	65.46	68.72	686	27	92.58	96.43	Yeterli ✓ / Sufficient ✓	96.43
d	M1	40	50	741	28	65.46	68.72	686	27	92.58	96.43	Yeterli ✓ / Sufficient ✓	96.43
MATH 102 - Matematik II / MATH 102 - Calculus II													
a	M1	40	50	215	7	57.60	73.61	182	7	84.65	100.00	Yeterli ✓ / Sufficient ✓	100.00
b	M1	40	50	215	7	57.60	73.61	182	7	84.65	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	40	50	215	7	57.60	73.61	182	7	84.65	100.00	Yeterli ✓ / Sufficient ✓	100.00
MATH 241 - Mühendislik Matematiği I / MATH 241 - Engineering Mathematics I													
a	M1	25	75	129	19	41.65	38.03	112	15	86.82	78.95	Yeterli ✓ / Sufficient ✓	78.95
d	M1	25	75	129	19	41.65	38.03	112	15	86.82	78.95	Yeterli ✓ / Sufficient ✓	78.95

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
MATH 242 - Mühendislik Matematiği II / MATH 242 - Engineering Mathematics II													
a	M1	30	75	70	9	57.16	57.31	68	9	97.14	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	30	75	70	9	57.16	57.31	68	9	97.14	100.00	Yeterli ✓ / Sufficient ✓	100.00
MBG 110 - Modern Biyolojiye Giriş / MBG 110 - Introduction to Modern Biology													
b	M1	50	50	450	20	64.65	77.92	345	20	76.67	100.00	Yeterli ✓ / Sufficient ✓	100.00
g	M1	50	50	450	20	64.65	77.92	345	20	76.67	100.00	Yeterli ✓ / Sufficient ✓	100.00
PHYS 101 - Genel Fizik I / PHYS 101 - General Physics I													
a	M1	50	50	663	28	68.54	69.07	598	26	90.20	92.86	Yeterli ✓ / Sufficient ✓	92.86
b	M1	50	50	663	28	68.54	69.07	598	26	90.20	92.86	Yeterli ✓ / Sufficient ✓	92.86
e	M1	50	50	663	28	68.54	69.07	598	26	90.20	92.86	Yeterli ✓ / Sufficient ✓	92.86
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	135	6	63.16	84.31	107	6	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
b	M1	50	50	135	6	63.16	84.31	107	6	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	50	50	135	6	63.16	84.31	107	6	79.26	100.00	Yeterli ✓ / Sufficient ✓	100.00
PHYS 120 - Fizik Öğrencileri İçin Üniversite Hayatına Giriş / PHYS 120 - Orientation for Physics Majors													
c	M1	50	50	31	30	96.28	96.15	31	30	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
i	M1	50	50	31	30	96.28	96.15	31	30	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
PHYS 211 - Dalgalar, Optik ve Termodinamik / PHYS 211 - Waves, Optics and Thermodynamics													
a	M1	50	50	43	32	69.13	70.22	41	32	95.35	100.00	Yeterli ✓ / Sufficient ✓	100.00
c	M1	50	50	43	32	69.13	70.22	41	32	95.35	100.00	Yeterli ✓ / Sufficient ✓	100.00
PHYS 315 - Elektromanyetik Teori I / PHYS 315 - Electromagnetic Theory I													
a	M1	50	50	21	19	69.94	70.67	18	16	85.71	84.21	Yeterli ✓ / Sufficient ✓	84.21
c	M1	50	50	21	19	69.94	70.67	18	16	85.71	84.21	Yeterli ✓ / Sufficient ✓	84.21

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
PHYS 325 - Kuantum Mekanik I / PHYS 325 - Quantum Mechanics I													
a	M1	50	50	30	22	75.00	74.85	27	21	90.00	95.45	Yeterli ✓ / Sufficient ✓	95.45
c	M1	50	50	30	22	75.00	74.85	27	21	90.00	95.45	Yeterli ✓ / Sufficient ✓	95.45
PHYS 371 - Fizikte Sayısal Yöntemler / PHYS 371 - Numerical Methods in Physics													
c	M1	50	50	32	24	87.37	85.79	29	21	90.63	87.50	Yeterli ✓ / Sufficient ✓	87.50
d	M1	50	50	32	24	87.37	85.79	29	21	90.63	87.50	Yeterli ✓ / Sufficient ✓	87.50
e	M1	50	50	32	24	87.37	85.79	29	21	90.63	87.50	Yeterli ✓ / Sufficient ✓	87.50
PHYS 491 - Bitirme Projesi I / PHYS 491 - Senior Project I													
b	M1	50	50	26	26	90.74	90.74	26	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
c	M1	50	50	26	26	90.74	90.74	26	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	50	50	26	26	90.74	90.74	26	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	50	50	26	26	90.74	90.74	26	26	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
PHYS 492 - Bitirme Projesi II / PHYS 492 - Senior Project II													
b	M1	50	50	2	2	87.00	87.00	2	2	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
c	M1	50	50	2	2	87.00	87.00	2	2	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
d	M1	50	50	2	2	87.00	87.00	2	2	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
e	M1	50	50	2	2	87.00	87.00	2	2	100.00	100.00	Yeterli ✓ / Sufficient ✓	100.00
TURK 101 - Türkçe I / TURK 101 - Turkish I													
e	M1	70	60	1516	21	87.68	88.01	1493	21	98.48	100.00	Yeterli ✓ / Sufficient ✓	100.00
h	M1	70	60	1516	21	87.68	88.01	1493	21	98.48	100.00	Yeterli ✓ / Sufficient ✓	100.00
TURK 102 - Türkçe II / TURK 102 - Turkish II													
a	M1	70	60	492	8	90.84	94.94	487	8	98.98	100.00	Yeterli ✓ / Sufficient ✓	100.00
h	M1	70	60	492	8	90.84	94.94	487	8	98.98	100.00	Yeterli ✓ / Sufficient ✓	100.00

4.2.2.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

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		51	12	68.28	77.11	49	12	96.08	100	Yeterli ✓ / Sufficient ✓	77.11
b	M3	50		51	12	68.28	77.11	49	12	96.08	100	Yeterli ✓ / Sufficient ✓	77.11
c	M3	50		51	12	68.28	77.11	49	12	96.08	100	Yeterli ✓ / Sufficient ✓	77.11
CHEM 201 - Malzeme Bilimi ve Teknolojisi / CHEM 201 - Materials Science and Technology													
a	M1	50	70	67	8	54.8	46.29	36	4	53.73	50	İyileştirmeye Açık! / Insufficient!	50
c	M1	50	70	67	8	54.8	46.29	36	4	53.73	50	İyileştirmeye Açık! / Insufficient!	50
COMD 358 - Profesyonel İletişim / COMD 358 - Professional Communication													
e	M1	60	70	362	9	84.12	87.39	357	9	98.62	100	Yeterli ✓ / Sufficient ✓	100
f	M1	60	70	362	9	84.12	87.39	357	9	98.62	100	Yeterli ✓ / Sufficient ✓	100
i	M1	60	70	362	9	84.12	87.39	357	9	98.62	100	Yeterli ✓ / Sufficient ✓	100
CS 115 - Python ile Programlamaya Giriş / CS 115 - Introduction to Programming in Python													
d	M1	40	75	245	18	67.23	76.16	236	18	96.33	100	Yeterli ✓ / Sufficient ✓	100
ENG 101 - İngilizce ve Kompozisyon I / ENG 101 - English and Composition I													
e	M1	70	75	740	12	81.27	89.04	662	12	89.46	100	Yeterli ✓ / Sufficient ✓	100
ENG 102 - İngilizce ve Kompozisyon II / ENG 102 - English and Composition II													
e	M1	70	70	1495	17	84.92	89.84	1428	17	95.52	100	Yeterli ✓ / Sufficient ✓	100

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	587	10	96.22	100	587	10	100	100	Yeterli ✓ / Sufficient ✓	100
j	M1	12	80	587	10	96.22	100	587	10	100	100	Yeterli ✓ / Sufficient ✓	100
GE 251 - Üniversite Etkinlik Programı II / GE 251 - Collegiate Activities Program II													
	M1	70	70	1375	21	93.49	93.57	1287	20	93.6	95.24	Yeterli ✓ / Sufficient ✓	95.24
HIST 200 - Türkiye Tarihi / HIST 200 - History of Turkey													
e	M1	70	75	968	11	92.06	93.41	931	11	96.18	100	Yeterli ✓ / Sufficient ✓	100
f	M1	70	75	968	11	92.06	93.41	931	11	96.18	100	Yeterli ✓ / Sufficient ✓	100
HUM 111 - Kültürler, Medeniyetler ve Düşünceler I / HUM 111 - Cultures Civilizations and Ideas I													
d	M1	60	75	465	13	80.91	87.53	457	13	98.28	100	Yeterli ✓ / Sufficient ✓	100
e	M1	60	75	465	13	80.91	87.53	457	13	98.28	100	Yeterli ✓ / Sufficient ✓	100
HUM 112 - Kültürler, Medeniyetler ve Düşünceler II / HUM 112 - Cultures Civilizations and Ideas II													
d	M1	50	75	937	17	85.62	90.83	937	17	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	75	937	17	85.62	90.83	937	17	100	100	Yeterli ✓ / Sufficient ✓	100
MATH 101 - Matematik I / MATH 101 - Calculus I													
a	M1	40	50	263	13	58.04	69.46	217	13	82.51	100	Yeterli ✓ / Sufficient ✓	100
b	M1	40	50	263	13	58.04	69.46	217	13	82.51	100	Yeterli ✓ / Sufficient ✓	100
d	M1	40	50	263	13	58.04	69.46	217	13	82.51	100	Yeterli ✓ / Sufficient ✓	100
MATH 102 - Matematik II / MATH 102 - Calculus II													
a	M1	40	50	694	24	55.51	59.48	518	22	74.64	91.67	Yeterli ✓ / Sufficient ✓	91.67
b	M1	40	50	694	24	55.51	59.48	518	22	74.64	91.67	Yeterli ✓ / Sufficient ✓	91.67
d	M1	40	50	694	24	55.51	59.48	518	22	74.64	91.67	Yeterli ✓ / Sufficient ✓	91.67

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 241 - Mühendislik Matematiği I / MATH 241 - Engineering Mathematics I													
a	M1	25	75	76	14	47.95	55.49	73	14	96.05	100	Yeterli ✓ / Sufficient ✓	100
d	M1	25	75	76	14	47.95	55.49	73	14	96.05	100	Yeterli ✓ / Sufficient ✓	100
MATH 242 - Mühendislik Matematiği II / MATH 242 - Engineering Mathematics II													
a	M1	30	75	139	22	64.53	67.3	138	22	99.28	100	Yeterli ✓ / Sufficient ✓	100
d	M1	30	75	139	22	64.53	67.3	138	22	99.28	100	Yeterli ✓ / Sufficient ✓	100
MBG 110 - Modern Biyolojiye Giriş / MBG 110 - Introduction to Modern Biology													
b	M1	50	50	446	10	70.85	86.09	410	10	91.93	100	Yeterli ✓ / Sufficient ✓	100
g	M1	50	50	446	10	70.85	86.09	410	10	91.93	100	Yeterli ✓ / Sufficient ✓	100
PHYS 101 - Genel Fizik I / PHYS 101 - General Physics I													
a	M1	50	50	274	11	65.93	80.89	223	11	81.39	100	Yeterli ✓ / Sufficient ✓	100
b	M1	50	50	274	11	65.93	80.89	223	11	81.39	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	274	11	65.93	80.89	223	11	81.39	100	Yeterli ✓ / Sufficient ✓	100
PHYS 102 - Genel Fizik II / PHYS 102 - General Physics II													
a	M1	50	50	647	24	64.72	70.26	549	24	84.85	100	Yeterli ✓ / Sufficient ✓	100
b	M1	50	50	647	24	64.72	70.26	549	24	84.85	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	647	24	64.72	70.26	549	24	84.85	100	Yeterli ✓ / Sufficient ✓	100
PHYS 124 - Proje / PHYS 124 - Freshman Project													
b	M1	50	50	25	25	88.36	88.36	25	25	100	100	Yeterli ✓ / Sufficient ✓	100
d	M1	50	50	25	25	88.36	88.36	25	25	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	25	25	88.36	88.36	25	25	100	100	Yeterli ✓ / Sufficient ✓	100

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 212 - Modern Fizik / PHYS 212 - Modern Physics													
a	M1	50	50	49	42	85.4	84.6	49	42	100	100	Yeterli ✓ / Sufficient ✓	100
c	M1	50	50	49	42	85.4	84.6	49	42	100	100	Yeterli ✓ / Sufficient ✓	100
g	M1	50	50	49	42	85.4	84.6	49	42	100	100	Yeterli ✓ / Sufficient ✓	100
PHYS 218 - Analitik Mekanik / PHYS 218 - Analytical Mechanics													
a	M1	50	50	35	33	64.41	63.44	27	25	77.14	75.76	Yeterli ✓ / Sufficient ✓	75.76
c	M1	50	50	35	33	64.41	63.44	27	25	77.14	75.76	Yeterli ✓ / Sufficient ✓	75.76
d	M1	50	50	35	33	64.41	63.44	27	25	77.14	75.76	Yeterli ✓ / Sufficient ✓	75.76
PHYS 242 - Fizik Uygulamaları İçin İleri Matematik / PHYS 242 - Advanced Calculus for Applications in Physics													
a	M1	50	50	36	32	74.25	72.88	32	28	88.89	87.5	Yeterli ✓ / Sufficient ✓	87.5
PHYS 334 - İstatistiksel Fizik / PHYS 334 - Statistical Physics													
a	M1	50	50	37	33	59.05	59.2	24	21	64.86	63.64	Yeterli ✓ / Sufficient ✓	63.64
PHYS 374 - Fiziğin Deneysel Yöntemleri / PHYS 374 - Experimental Methods of Physics													
b	M1	50	50	24	24	86.49	86.49	24	24	100	100	Yeterli ✓ / Sufficient ✓	100
d	M1	50	50	24	24	86.49	86.49	24	24	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	24	24	86.49	86.49	24	24	100	100	Yeterli ✓ / Sufficient ✓	100
f	M1	50	50	24	24	86.49	86.49	24	24	100	100	Yeterli ✓ / Sufficient ✓	100
h	M1	50	50	24	24	86.49	86.49	24	24	100	100	Yeterli ✓ / Sufficient ✓	100

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 492 - Bitirme Projesi II / PHYS 492 - Senior Project II													
b	M1	50	50	25	25	90.3	90.3	25	25	100	100	Yeterli ✓ / Sufficient ✓	100
c	M1	50	50	25	25	90.3	90.3	25	25	100	100	Yeterli ✓ / Sufficient ✓	100
d	M1	50	50	25	25	90.3	90.3	25	25	100	100	Yeterli ✓ / Sufficient ✓	100
e	M1	50	50	25	25	90.3	90.3	25	25	100	100	Yeterli ✓ / Sufficient ✓	100
TURK 101 - Türkçe I / TURK 101 - Turkish I													
e	M1	70	60	612	11	86.39	93.17	605	11	98.86	100	Yeterli ✓ / Sufficient ✓	100
h	M1	70	60	612	11	86.39	93.17	605	11	98.86	100	Yeterli ✓ / Sufficient ✓	100
TURK 102 - Türkçe II / TURK 102 - Turkish II													
a	M1	70	60	1438	17	88.83	86.57	1425	15	99.1	88.24	Yeterli ✓ / Sufficient ✓	88.24
h	M1	70	60	1438	17	88.83	86.57	1425	15	99.1	88.24	Yeterli ✓ / Sufficient ✓	88.24

4.3. PERFORMANS ÖLÇÜM SONUÇLARI / PERFORMANCE MEASUREMENT RESULTS

4.3.1. PROGRAM ÇIKTILARI PERFORMANS TABLOSU / PROGRAM OUTCOMES PERFORMANCE TABLE

4.3.1.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes									
	a	b	c	d	e	f	g	h	i	j
CHEM 101	✓	✓	✓							
CHEM 201	✓		✓							
COMD 358					✓	✓			✓	
CS 115				✓						
ENG 101					✓					
ENG 102					✓					
GE 100								✓		✓
GE 251										✓
HIST 200					✓	✓				
HUM 111				✓	✓					
HUM 112				✓	✓					
MATH 101	✓	✓		✓						
MATH 102	✓	✓		✓						
MATH 241	✓			✓						
MATH 242	✓			✓						
MBG 110		✓					✓			
PHYS 101	✓	✓			✓					
PHYS 102	✓	✓			✓					
PHYS 120			✓						✓	
PHYS 211	✓		✓							
PHYS 315	✓		✓							
PHYS 325	✓		✓							
PHYS 371			✓	✓	✓					
PHYS 491		✓	✓	✓	✓					
PHYS 492		✓	✓	✓	✓					
TURK 101					✓			✓		
TURK 102	✓							✓		

Tablo.4.3.1.1. 2023-2024 Akademik Yılı Güz Dönemi Fizik Lisans Programı Program Çıktıları Performans Tablosu / **Table.4.3.1.1.** 2023-2024 Academic Year Fall Semester Physics Undergraduate Program - Program Outcomes Performance Table

4.3.1.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes									
	a	b	c	d	e	f	g	h	i	j
CHEM 101	✓	✓	✓							
CHEM 201	X		X							
COMD 358					✓	✓			✓	
CS 115				✓						
ENG 101					✓					
ENG 102					✓					
GE 100								✓		✓
GE 251										✓
HIST 200					✓	✓				
HUM 111				✓	✓					
HUM 112				✓	✓					
MATH 101	✓	✓		✓						
MATH 102	✓	✓		✓						
MATH 241	✓			✓						
MATH 242	✓			✓						
MBG 110		✓					✓			
PHYS 101	✓	✓			✓					
PHYS 102	✓	✓			✓					
PHYS 124		✓		✓	✓					
PHYS 212	✓		✓				✓			
PHYS 218	✓		✓	✓						
PHYS 242	✓									
PHYS 334	✓									
PHYS 374		✓		✓	✓	✓		✓		
PHYS 492		✓	✓	✓	✓					
TURK 101					✓			✓		
TURK 102	✓							✓		

Tablo.4.3.1.2. 2023-2024 Akademik Yılı Bahar Dönemi Fizik Lisans Programı Program Çıktıları Performans Tablosu / Table.4.3.1.2. 2023-2024 Academic Year Spring Semester Physics Undergraduate Program - Program Outcomes Performance Table

4.3.2. PROGRAM ÇIKTILARI PERFORMANS ORANLARI / PROGRAM OUTCOMES PERFORMANCE RATES

4.3.2.1. 2023-2024 Akademik Yılı Güz Dönemi için / For 2023-2024 Academic Year Fall Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes									
	a	b	c	d	e	f	g	h	i	j
CHEM 101	75.39	75.39	75.39							
CHEM 201	77.78		77.78							
COMD 358					100.00	100.00			100.00	
CS 115				100.00						
ENG 101					100.00					
ENG 102					100.00					
GE 100								100.00		100.00
GE 251										81.82
HIST 200					100.00	100.00				
HUM 111				100.00	100.00					
HUM 112				100.00	100.00					
MATH 101	96.43	96.43		96.43						
MATH 102	100.00	100.00		100.00						
MATH 241	78.95			78.95						
MATH 242	100.00			100.00						
MBG 110		100.00					100.00			
PHYS 101	92.86	92.86			92.86					
PHYS 102	100.00	100.00			100.00					
PHYS 120			100.00						100.00	
PHYS 211	100.00		100.00							
PHYS 315	84.21		84.21							
PHYS 325	95.45		95.45							
PHYS 371			87.50	87.50	87.50					
PHYS 491		100.00	100.00	100.00	100.00					
PHYS 492		100.00	100.00	100.00	100.00					
TURK 101					100.00			100.00		
TURK 102	100.00							100.00		

Tablo.4.3.2.1. 2023-2024 Akademik Yılı Güz Dönemi Fizik Lisans Programı Program Çıktıları Performans Oranları Tablosu / Table.4.3.2.1. 2023-2024 Academic Year Fall Semester Physics Undergraduate Program - Program Outcomes Performance Rates Table

4.3.2.2. 2023-2024 Akademik Yılı Bahar Dönemi için / For 2023-2024 Academic Year Spring Semester;

Dersler / Courses	Program Çıktıları / Program Outcomes									
	a	b	c	d	e	f	g	h	i	j
CHEM 101	77.11	77.11	77.11							
CHEM 201	50		50							
COMD 358					100	100			100	
CS 115				100						
ENG 101					100					
ENG 102					100					
GE 100								100		100
GE 251										95.24
HIST 200					100	100				
HUM 111				100	100					
HUM 112				100	100					
MATH 101	100	100		100						
MATH 102	91.67	91.67		91.67						
MATH 241	100			100						
MATH 242	100			100						
MBG 110		100					100			
PHYS 101	100	100			100					
PHYS 102	100	100			100					
PHYS 124		100		100	100					
PHYS 212	100		100				100			
PHYS 218	75.76		75.76	75.76						
PHYS 242	87.5									
PHYS 334	63.64									
PHYS 374		100		100	100	100		100		
PHYS 492		100	100	100	100					
TURK 101					100			100		
TURK 102	88.24							88.24		

Tablo.4.3.2.2. 2023-2024 Akademik Yılı Bahar Dönemi Fizik Lisans Programı Program Çıktıları Performans Oranları Tablosu / Table.4.3.2.2. 2023-2024 Academic Year Spring Semester Physics Undergraduate Program - Program Outcomes Performance Rates Table

5. DEĞERLENDİRME / EVALUATION

5.1. PROGRAM ÇIKTILARI ÖLÇÜM SONUÇLARININ DEĞERLENDİRİLMESİ / EVALUATION OF PROGRAM OUTCOMES MEASUREMENT RESULTS

This evaluation report summarizes the outcomes of the educational measurements conducted across the Physics Department's curriculum. Our assessment covered more than 50 courses and evaluated over 150 distinct learning outcomes. Remarkably, only two outcomes were found to be insufficient. These outcomes were associated with CHEM 201, a course completed by only four physics students. It is noteworthy that if just one more student in this course had met the threshold grade, the measurement would have been considered successful. Given the extremely small sample size, the results for CHEM 201 lack statistical significance and do not provide a meaningful representation of the overall performance.

The insufficient outcomes identified in CHEM 201 underscore the limitations inherent in measuring courses with very few participants. With only four students enrolled, the results are highly sensitive to individual performance variations. This year's data suggests that a single student's performance significantly impacted the overall outcome for CHEM 201, highlighting the need for a larger sample size to draw more reliable conclusions.

This academic year marks the first instance in which all mandatory courses within our curriculum have undergone measurement. We are pleased to report that the results for all mandatory physics courses (PHYS) were satisfactory. This achievement demonstrates the robustness of our curriculum and the effectiveness of our instructional strategies in meeting educational objectives. The satisfactory results across the PHYS courses provide a solid foundation for future assessments and continuous improvement.

Additionally, it is important to note that many of our course measurements reached a saturation point of 100%. While this indicates that students are consistently meeting or exceeding the established criteria, it also suggests that our current evaluation thresholds may not be adequately challenging. To ensure that our assessments continue to promote high standards of learning and accurately reflect student performance, we may need to revisit and possibly modify our criteria. Adjusting the criteria will help maintain rigorous academic standards and support our goal of continuous improvement.

In conclusion, the overall results of this year's educational measurements are highly encouraging, with the exception of the statistically insignificant outcomes in CHEM 201. Moving forward, we will consider strategies to address the small sample size issue in certain courses and re-evaluate our measurement criteria to prevent saturation. These steps will enhance the precision and effectiveness of our educational assessments, ensuring they continue to serve as a valuable tool for academic quality and improvement in the Physics Department.

5.2. EĞİTİM AMAÇLARININ DEĞERLENDİRİLMESİ / EVALUATION OF EDUCATIONAL OBJECTIVES

The education in the Physics department aims to train scientists by accepting a small number of select students. To achieve this goal, the department focuses on enhancing students' theoretical knowledge, developing their experimental skills, and strengthening their research abilities. As stated in previous years, two primary methods are used to evaluate the educational objectives of the Physics department. The first method involves regularly obtaining feedback from the established Advisory Board of Department. This board, consisting of experts in the field, industry representatives, and alumni, reviews the department's educational programs and provides recommendations for improvement. The second method is the systematic tracking of the careers of the department's graduates. Although this has not yet provided highly effective oversight, the following two methods have proved beneficial for more directly evaluating our educational objectives:

- As indicated in the reports of the past two academic years, a detailed list of alumni has been prepared by the department, and continuous efforts are made to keep this list updated. Examining the distribution of graduates, it is observed that initially, most of them pursue master's and doctoral studies, and in the long term, they follow research-oriented careers. In recent years, it has been noted that in addition to academic careers, they have also started to move towards industrial research and engineering positions. Geographically, while some graduates continue their careers domestically, approximately 40% of them pursue their careers in the USA and Europe. Despite the difficulty of creating a database for such a widely dispersed group of graduates, it has been largely accomplished.
- Instead of conducting an exit interview just before graduation to gather feedback from graduates, as we have done in previous years, this academic year, a social session was organized on April 24, 2024, bringing together fourth-year students and faculty members, and significant feedback was obtained. Additionally, meetings were held with our Physics Department Student Representative, Arda Erkan, on February 7, 2024, and May 28, 2024, to evaluate the criticisms received from students in all classes.

All these inputs are of great value for reviewing the educational objectives in the coming years.