Tarih: 3 Şubat 2026 19:05

Year

Department of Mathematics Education / Department of Mathematics and Science Education /

Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
İMEAE 104	ANALYSIS 2	2.00	0.00	0.00	2.00	4.00

Course Detail

Course Language	:	Turkish
Qualification Degree	:	Bachelor
Course Type	:	Compulsory
Preconditions	:	Not
Objectives of the Course	:	To conduct studies in a way that will teach prospective teachers the subjects of definite and indefinite integrals and their applications in various fields in detail.
Course Contents	:	This course covers integral and its applications
Recommended or Required Reading	:	1. Zafer Yayınları Matematik 3. seri. 2.Textbook and notebook Balcı, M. (2021). Genel Matematik 1, Palme Yayıncılık
Planned Learning Activities and Teaching Methods	:	Lecture; Discussion; Question-Answer; Case Study
Recommended Optional Programme Components	:	It is not available.
Course Instructors	:	Prof. Dr. Şenol Kartal
Instructor's Assistants	:	It is not available
Presentation Of Course	:	face to face
Update Date	:	2/3/2026 6:52:16 PM
Dosya İndirilme Tarihi	:	2/3/2026

Course Outcomes

Upon the completion of this course a student :
1 Knows the rules of integration
2 Gain basic knowledge of Riemann sum
3 Calculates area using definite integrals.
4 Calculates volume using definite integrals.

Pre / Side Conditions

Course Code	Course Name	Condition	Teorical	Practice	Laboratory	Credits	ECTS

Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods	Course Learning Outcomes
1.Week	*Indefinite integral			*1. Study the topics "Differential, Integral, Indefinite Integral of a Function" between pages 439-442 in your reference book.		Ö.Ç.1 Ö.Ç.1
2.Week	*Integration Methods (Change of Variables Method)			*1. Study the topics "Integration Methods (Change of Variables)" between pages 443-452 in your source book.		Ö.Ç.1
3.Week	*Integration Methods (Integration of Exponential and Logarithmic Functions)			*1. Study the topics "Integration Methods" between pages 452-464 in your source book.		Ö.Ç.1
4.Week	*Integration Methods (Partial Integration)			*1. Study the topics "Partial Integration Method" between pages 475-485 in your source book.		Ö.Ç.1
5.Week	*Integration Methods (Trigonometric Variable Transformations)			*1. Kaynak kitabınızdan 464-472 sayfaları arası "Trigonometrik Değişken Dönüşümü " konularını çalışınız.		Ö.Ç.1
6.Week	*Integration Methods (Integration of Rational Functions)			*1. Study the topics "Integral of Rational Functions" between pages 495-503 in your reference book.		Ö.Ç.1
7.Week	*Integration Methods (Integration of Rational Functions)			*1. Study the topics "Integral of Rational Functions" between pages 495-503 in your reference book.		Ö.Ç.1
8.Week	*Midterm Exam					
9.Week	*Integration Methods (Integration of Rational Functions)			*1. Study the topics "Integral of Rational Functions" between pages 495-503 in your reference book.		Ö.Ç.1
10.Week	*Riemann Sum Definite Integral			*1. Study the topics "Definite Integral as a Riemann Sum" between pages 509-513 in the source book.		
11.Week	*Applications of Definite Integral (Area Calculation)			*1. Study the topics "Applications of Definite Integral and Area Calculus" between pages 528-534 in your reference book.		Ö.Ç.1 Ö.Ç.2 Ö.Ç.3
12.Week	*Applications of Definite Integral (Area Calculation)			*1. Study the topics "Applications of Definite Integral and Area Calculus" between pages 528-534 in your reference book.		Ö.Ç.1 Ö.Ç.2 Ö.Ç.3
13.Week	*Applications of Definite Integral (Area Calculation)			*1. Study the topics "Applications of Definite Integral and Area Calculus" between pages 528-534 in your reference book.		Ö.Ç.1 Ö.Ç.2 Ö.Ç.3
14.Week	*Applications of Definite Integral (Volume Calculation)			*1. Study pages 534-540 of your textbook on "Applications of Definite Integrals and Volume Calculation". *1. Study the topics "Applications of Definite Integral Volume Calculation" between pages 534-540 in your reference book.	*Narration - Question and Answer - Discussion	Ö.Ç.1 Ö.Ç.2 Ö.Ç.3 Ö.Ç.4 Ö.Ç.1 Ö.Ç.2 Ö.Ç.3 Ö.Ç.4 Ö.Ç.1 Ö.Ç.2 Ö.Ç.3 Ö.Ç.4
15.Week	*Applications of Definite Integral (Volume Calculation)			*1. Study the topics "Applications of Definite Integral Volume Calculation" between pages 534-540 in your reference book.		Ö.Ç.1 Ö.Ç.2 Ö.Ç.3 Ö.Ç.4

Assesment Methods %

1 Ara Sınav : 40.000

3 Final : 60.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload
Final	1	1.00	1.00
Final Sınavı Hazırlık	12	2.00	24.00

Activities	Count	Time(Hour)	Sum of Workload
Vize	1	1.00	1.00
Ders Öncesi Bireysel Çalışma	12	2.00	24.00
Ders Sonrası Bireysel Çalışma	12	2.00	24.00
Derse Katılım	12	2.00	24.00
Uygulama / Pratik	12	2.00	24.00
Teorik Ders Anlatım	12	1.00	12.00
		Total :	134.00
		Sum of Workload / 30 (Hour) :	4
		ECTS :	4.00

Program And OutcomeRelation

	P.O.1	P.O.2	P.O.3	P.O.4	P.O.5	P.O.6	P.O.7	P.O.8	P.O.9	P.O.10	P.O.11	P.O.12	P.O.13	P.O.14	P.O.15	P.O.16	P.O.17	P.O.18	P.O.19	P.O.20	P.O.21	P.O.22	P.O.23	P.O.24
	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14	P.O. 15	P.O. 16	P.O. 17	P.O. 18	P.O. 19	P.O. 20	P.O. 21	P.O. 22	P.O. 23	P.O. 2
L.O. 1	0	0	4	0	0	0	5	0	0	4	0	5	0	0	0	0	2	3	0	0	2	0	0	0
L.O. 2	0	0	4	0	0	0	5	0	0	4	0	5	0	0	0	0	2	3	0	0	2	0	0	0
L.O. 3	0	0	4	0	0	0	5	0	0	4	0	5	0	0	0	0	2	3	0	0	2	0	0	0
L.O. 4	0	0	4	0	0	0	5	0	0	4	0	5	0	0	0	0	2	3	0	0	2	0	0	0
Avarage	5.00	5.00	4.50	0.00	3.75	0.00	4.50	2.00	0.00	3.50	0.00	5.00	0.00	1.25	0.00	0.00	3.00	3.00	0.00	0.00	2.75	0.00	0.00	0.00

Ders/Program Çıktıları İlişkisi

P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14	P.O. 15	P.O. 16	P.O. 17	P.O. 18	P.O. 19	P.O. 20	P.O. 21	P.O. 22	P.O. 23	P.O. 24
20	20	18	0	15	0	18	8	0	14	0	20	0	5	0	0	12	12	0	0	11	0	0	0

BEWARE OF PLAGIARISM! Please pay attention to proper academic citation rules and avoid plagiarism, an unethical and academically fraudulent behavior, when completing reports, assignments, or other academic works, and it is treated with the same disciplinary action as cheating in a classroom setting. It is imperative to refrain from presenting another person s ideas, language, expressions, or any other form of intellectual property as your own. Regardless of quality, your assignments/projects/research should reflect your original work. Perfection is not a requirement, and in case of any uncertainties regarding academic writing guidelines, you may seek clarification from your course instructor.

Engel Durumu/Uyarlama Talebi : Engel durumuna ilişkin herhangi bir uyarlama talebinde bulunmak isteyen öğrenciler, dersin öğretim elemanı ya da Nevsehir Engelli Öğrenci Birimi ile en kısa sürede iletişime geçmelidir.