

Spring 2025

## MATH 126, Basic Mathematics II

**Frequency:** Spring Semester    **METU Credit:** 4(3-2)

**Catalog description:** Analytic Geometry in  $\mathbb{R}^2$ ,  $\mathbb{R}^3$ . Functions of one and several variables: Limit, continuity and differentiation. Chain rule, implicit differentiation. Differential calculus, Lagrange multipliers. The definite integral. The indefinite integral. Logarithmic and exponential functions. Techniques of integration: Integration by substitution, integration by parts, integration by partial fractions.

**Course instructor:** Ebru Solak

**Coordinator Assistant:** Yiğit Demir

**Suggested textbook:** M. Dabbagh, A. Doğanaksoy, Calculus for Students of Social Sciences. (can be found at Math Depart., Room Z23)

**Suggested reference book:** Any calculus book for freshman students

**Course Webpage:** <http://ma126.math.metu.edu.tr/>

**NOTE:** All students enrolled in this course are supposed to follow the [ODTUClass Math 126 webpage](#) regularly, since they are responsible for catching up **announcements** listed.

### **Grading Policy:**

MidTerm1:	30 Points	<b>April 5, 2025 at 17.00</b>
MidTerm2:	30 Points	<b>May 10, 2025 at 17.00</b>
Final Exam:	40 Points	<b>June 13, 2025 at 17.00</b>

Week	Dates	(Tentative) Syllabus (Math 126) Spring 2025
1	February 17-21	<b>Ch 1: Analytic Geometry</b> Coordinate Systems
2	February 24- 28	Curves
3	March 03-07	Surfaces Vectors
4	March 10-14	Planes Straight Lines
5	March 17-21	<b>Ch 2: Functions, Limits, Continuity</b> Functions of Several Variables Limits of Single Valued Functions
6	March 24-28	Continuity of Single Valued Functions
7	March 31-April 04	<b>NO CLASS ON 31.MARCH</b> March 30 – April 01 Religious holiday (Holiday eve Saturday) Limits and Continuity of Functions of Several Variables
8	April 07-11	☺Midterm 1 (April 05, 2025 at 17.00) <b>Ch 3: Differentiation</b> The Derivative, Partial Derivatives
9	April 14-18	Tangent Line Approximation and Differentials Related Rates
10	April 21-25	<b>Ch 4: Applications of Differentiation</b> Extrema The Mean Value Theorem Concavity April 23 National Sovereignty and Children's Day, Wednesday <b>NO CLASS ON 23.APRIL</b>
11	April 28-May 02	Infinite Limits and Limits at Infinity Indeterminate Forms and L'Hopital's Rule May 1 – Labor and Solidarity Day, Thursday
12	May 05-09	Extrema of Functions of Several Variables ☺Midterm 2 (May 10, 2025 at 17.00)
13	May 12-16	<b>Ch 5: Integration</b> Definite Integral
14	May 19-23	May 19 - National Holiday (Commemoration of Atatürk & Youth and Sports Festival, Monday) Anti-derivatives and Indefinite Integral

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**May 26-30**

Logarithmic and Exponential Functions

Methods of Integration

## **MATH 126 Course Policy (Spring 2025)**

This document/announcement contains all the necessary information that you need to know about the structure of the **MATH 126: Basic Mathematics II** course. More information will be announced on the ODTUCLASS page. All students enrolled in this course are supposed to follow these Odtuclass page of this course regularly.

*MATH 126 Coordination reserves the right to make necessary changes in this policy depending on the situations which are out of our control. So it is your responsibility to follow the announcements in Odtuclass regularly.*

### **Lectures and Recitations**

Lectures and Recitations are delivered as announced in **Schedule of Lectures** on the official website of the course. Keep in mind that this course is **5 (=3+2) hours per week**. The first 3 hours are for **lectures** and the last 2 hours are for **recitations**.

#### **Lectures**

Monday	08:40 - 10:30	G111
Wednesday	08:40 - 09:30	G111

### **Class Attendance**

You are **expected** to attend all lectures and recitations. However no attendance will be taken.

### **Make up for Exams and Assignments**

You can have at most one make-up exam. In order to be able to take the make-up exam, you must present a reasonable excuse (such as a medical report or an academic leave).

(A) According to the university's rules and regulations governing undergraduate studies (Article 24),

*"...The grade NA is designated due to one of the conditions below. The grade NA is processed as FF in the calculation of the Grade Point Average.*

- 1) Not fulfilling the attendance requirements for the theoretical and practical course hours as indicated in the course schedule.*
- 2) Not qualifying to take the final exam due to failure in fulfilling the provisions regarding course practices.*
- 3) Having taken none of the mid-term and final examinations.*

**(B) If you miss more than one exam then you get NA.**

..."

**Note that each instructor/the coordination of the course reserves the right to determine whether the attendance requirements indicated in the above policy (B-1) applies to the students of their section or not.**

### **Information for Students with Disabilities**

Students who experience difficulties due to their disabilities and wish to obtain academic adjustments and/or auxiliary aids must contact ODTU Disability Support Office and/or course instructor and the advisor of students with disabilities at academic departments (for the list: <http://engelsiz.metu.edu.tr/en/advisor-students-disabilities>) as soon as possible. For detailed information, please visit the website of Disability Support Office: <https://engelsiz.metu.edu.tr/en/>

### **Academic Honesty**

The METU Honour Code is as follows: "Every member of METU community adopts the following honour code as one of the core principles of academic life and strives to develop an academic environment where continuous adherence to this code is promoted. The members of the METU community are reliable, responsible and honourable people who embrace only the success and recognition they deserve, and act with integrity in their use, evaluation and presentation of facts, data and documents."