

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Computer And Software Engineering

Course Information

MATHEMATICS I					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
MAT103	Fall	4	0	4	

Prerequisites and co-requisites	None
Language of instruction	English
Type	Required
Level of Course	Bachelor's
Lecturer	Asst. Prof. Çağdaş ALLAHVERDİ
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise (internship)	None
Objectives of the Course	To give limit, derivative and integral which are the fundamental subjects of engineering mathematics.
Contents of the Course	Functions, graphs of functions, limit calculation, evaluate derivatives, indefinite integration.

Learning Outcomes of Course

#	Learning Outcomes
1	To be able to draw the graphs of functions
2	To be able to calculate the limits of functions
3	To be able to take derivatives of functions
4	To be able to find the integrals of some special functions
5	To be able to understand mathematical terms in English

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Linear equations and inequalities	Classical lecture
2	Polynomials	Classical lecture
3	Rational Expressions	Classical lecture
4	Functions	Classical lecture
5	Logarithmic and Exponential Functions	Classical lecture
6	Cones	Classical lecture
7	Fundamentals of trigonometry	Classical lecture
8	Midterm Exam	Exam
9	Fundamentals of trigonometry	Classical lecture
10	Limit	Classical lecture
11	Derivative	Classical lecture
12	Derivative	Classical lecture
13	Applications of derivative	Classical lecture

14	Introduction to Integral	Classical lecture
15	Overview	Classical lecture
16	Final Exam	Exam

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	George B. Thomas Jr., Maurice D. Weir, Joel R. Hass Thomas' Calculus, 12th Edition.		
2	W. Michael Kelley, The Humongous Book of Calculus Problems, Penguin Group, 2006.		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	To be able to draw the graphs of functions	1,7	1,2
2	To be able to calculate the limits of functions	1,7	1,2
3	To be able to take derivatives of functions	1,7	1,2
4	To be able to find the integrals of some special functions	1,7	1,2
5	To be able to understand mathematical terms in English	1,7	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	4	56
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	4	56
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	1	3	3
9	Quiz	0	0	0
10	Homework	4	8	32
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	0	0	0
16	Final Exam	1	3	3

