

# TOROS ÜNİVERSİTESİ

Faculty Of Fine Arts, Design And Architecture  
Architecture

## Course Information

MATHEMATICS II					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
MAT102	Spring	2	0	2	2

<b>Prerequisites and co-requisites</b>	
<b>Language of instruction</b>	Turkish
<b>Type</b>	Required
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	Yusuf GÜL
<b>Mode of Delivery</b>	Face to Face
<b>Suggested Subject</b>	
<b>Professional practise ( internship )</b>	None
<b>Objectives of the Course</b>	Understanding basic mathematical concepts and increasing functional thinking
<b>Contents of the Course</b>	total proof methods, arrays and series types, limit and limit properties of functions, derivatives and applications, integrals and applications

## Learning Outcomes of Course

#	Learning Outcomes
1	Know basic mathematical concepts and number sets
2	Be able to perform operations on number sets
3	Use problem solving and functional thinking skills in daily life
4	demonstrate the ability to use them in other subjects with numerical contents.
5	Solving the problems practically in daily life
6	To be able to make commercial operations

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	complete proof of methods and applications	exposition,solution of exercises
2	Arrays and properties, sum and multiplication symbols	exposition,solution of exercises
3	Series and features	exposition,solution of exercises
4	limit concept, limit in functions	exposition,solution of exercises
5	uncertainty and uncertainty	exposition,solution of exercises
6	uncertainty and uncertainty	exposition,solution of exercises
7	First midterm exam	classic written exam
8	Definition and geometric meaning of derivative,	exposition,solution of exercises
9	derivatives of functions	exposition,solution of exercises
10	maximum and minimum problems and solutions	exposition,solution of exercises
11	Definition of integral and its applications	classic written exam

12	Definite integral, integration methods	exposition,solution of exercises
13	Volume of rotational bodies, finding arc length	exposition,solution of exercises
14	shell area calculation	exposition,solution of exercises
15		
16	Final Exam	classic written exam

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Matematik 2 kitabı	Yusuf GÜL	Toros Üniversitesi yayınları
2	Differential Equations	Shepley L.Ross	
3	Calculus and analytic geometry	Fisher and ziebur	

## 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	Know basic mathematical concepts and number sets	1,2	1,2
2	Be able to perform operations on number sets	1,2,3,4,5,6	1,2
3	Use problem solving and functional thinking skills in daily life	1,2,3,4,5,6	1,2
4	demonstrate the ability to use them in other subjects with numerical contents.	1,2,3,4,5,6,7,8	1,2,3
5	Solving the problems practically in daily life	1,2,3,4,5,6,7	1,3
6	To be able to make commercial operations	2,3,4,5,6,7,8	1,2,3

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	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
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	1	1	1
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	0	0	0
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	1	1	1
16	Final Exam	1	1	1
				<b>60</b>