

# TOROS ÜNİVERSİTESİ

Faculty Of Economic, Administrative And Social Sciences  
International Finance ( English )

## Course Information

MATHEMATICS II					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
MAT104	Spring	3	0	3	5

<b>Prerequisites and co-requisites</b>	
<b>Language of instruction</b>	English
<b>Type</b>	Required
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	
<b>Mode of Delivery</b>	Face to Face
<b>Suggested Subject</b>	
<b>Professional practise ( internship )</b>	None
<b>Objectives of the Course</b>	The aim of the course is to provide students with basic concepts of probability and to build the basis for the insurance and risk management classes.
<b>Contents of the Course</b>	The aim of the course is to provide students with basic concepts of probability and to build the basis for the insurance and risk management classes.

## Learning Outcomes of Course

#	Learning Outcomes
1	Understand probability concepts and definitions.
2	Learn probability distributions and their differences
3	Understand conditional probability and the indepenence of two events
4	Learn statistical distributions used in the insurance industry.

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Definitions of probability concepts	Lecture
2	Introduction to probability -1	Lecture
3	Introduction to probability -2	Lecture
4	Conditional probability	Lecture
5	Independence of two events, random variables and distributions	Lecture
6	Discrete random variables and distributions	Lecture
7	Discrete random variables and distributions	Lecture
8	Midterm	
9	Continuous random variables and distributions	Lecture
10	Continuous random variables and distributions	Lecture
11	Continuous random variables and distributions	Lecture
12	Integration under curve	Lecture

13	Integration under curve	Lecture
14	Expected value and moments	Lecture
15	Conclusion and Wrap up	Lecture
16	Final Exam	

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Ross, S. M. A first course in probability, 9th edition, Pearson, 2012		

## 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	Understand probability concepts and definitions.	5	
2	Learn probability distributions and their differences	3	
3	Understand conditional probability and the indepenence of two events	5	
4	Learn statistical distributions used in the insurance industry.	7	

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	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	3	42
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	14	14
8	Midterm Exam	1	3	3
9	Quiz	0	0	0
10	Homework	2	9	18
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	27	27
16	Final Exam	1	4	4
				<b>150</b>

