

# TOROS ÜNİVERSİTESİ

Faculty Of Health Sciences

## Course Information

### STATISTICS

Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
SKY203	Fall	2	2	3	7

<b>Prerequisites and co-requisites</b>	None
<b>Language of instruction</b>	Turkish
<b>Type</b>	Required
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	Assist.Prof.Dr. Ayhan DEMİRCİ
<b>Mode of Delivery</b>	Face to Face
<b>Suggested Subject</b>	None
<b>Professional practise ( internship )</b>	None
<b>Objectives of the Course</b>	To provide an introduction to some concepts of probability and statistics with applications of health enterprises problems. The course illustrates many examples of common statistical methods for students who would like to focus on descriptive relationships and information intensive fields.
<b>Contents of the Course</b>	Permutations, Combinatins, Probability, Discrete and Continuous random variables with their probability distributions and expectations, Sampling distributions.

## Learning Outcomes of Course

#	Learning Outcomes
1	will be able to define data and summarize the relationship between datas
2	will be able to create and use graphs for categorical and numerical data, and to describe relationships between variables
3	will be able to use measures of central tendency, variation, and shape, and use population summary measures
4	will be able to assess outcomes and events in a probability experiment, apply basic rules of probability
5	will be able to apply the concept of statistical independence and use Bayes' Theorem
6	will be able to use mean and standard deviation for discrete and continuous random variables
7	will be able to use and apply some special probability distributions, and the normal approximation to the binomial distribution
8	will be able to determine the skewness and curtosis of datas

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Basic statistical definitions. What is statistics and statistics?	Lecturing, Discussion
2	Data analysis.	Lecturing, Discussion
3	Data summarization methods. Frequency distributions and graphs.	Lecturing, Problem Solving
4	Data summarization methods. Central tendency measurements.	Lecturing, Problem Solving
5	Data summarization methods. Central variability measurements.	Lecturing, Problem Solving
6	Skewness and curtosis.	Lecturing, Problem Solving
7	Probability theory.	Lecturing, Problem Solving
8	Mid-Term Exam.	Written exam

9	Discrete probability distributions. Binomial Distribution.	Lecturing, Problem Solving
10	Discrete probability distributions. Poisson Distribution.	Lecturing, Problem Solving
11	Discrete probability distributions. Hypergeometric Distribution.	Lecturing, Problem Solving
12	Normal Distribution.	Lecturing, Problem Solving
13	Normalization of discrete probability distributions.	Lecturing, Problem Solving
14	Normalization of discrete probability distributions.	Lecturing, Problem Solving
15	Normalization of discrete probability distributions.	Lecturing, Problem Solving
16	Final Exam	Written exam

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Basic Statistics for Business and Economics	Earl K.Bowen Martin K.Starr	Reference Textbook
2	Introduction to Statistics	David R.Anderson Dennis J. Sweeney	Suggested Textbook
3	Elementary Statistics	Allan G.Bluman	Suggested Textbook

## 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	will be able to define data and summarize the relationship between datas	2,5	1,2
2	will be able to create and use graphs for categorical and numerical data, and to describe relationships between variables	2,5	1,2
3	will be able to use measures of central tendency, variation, and shape, and use population summary measures	2,5	1,2
4	will be able to assess outcomes and events in a probability experiment, apply basic rules of probability	2,5	1,2
5	will be able to apply the concept of statistical independence and use Bayes' Theorem	2,5	1,2
6	will be able to use mean and standard deviation for discrete and continuous random variables	2,5	1,2
7	will be able to use and apply some special probability distributions, and the normal approximation to the binomial distribution	2,5	1,2
8	will be able to determine the skewness and curtosis of datas	2,5	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	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	28	28
8	Midterm Exam	1	2	2
9	Quiz	0	0	0
10	Homework	2	8	16
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	3	3
				<b>160</b>