Department of Economics
Hacettepe University
ECO239 Statistics I
Fall 2021/2022
Course Information

=Instructor:	Dr. Shihomi Ara-Aksoy
Office:	Department of Economics
Email:	sara@hacettepe.edu.tr
Time/Place:	**Mondays, 9:00-11:50 (A2)**
Office Hours:	Monday 13:00-14:00, or by appointment
Course Website:	**http://www.shihomiaksoy.org**

Course Description/Objectives

The purpose of this course is to introduce the basic concepts of statistics. Methods of describing data, probability, discrete and continuous random variables, and their probability distributions will be discussed. Students are expected to learn the tools for describing and analyzing given data and to be acquainted with probability theory and probability distributions. Since the topics covered in this course will be a foundation for courses such as Statistics II and Econometrics. make sure to understand each concept clearly.

We have designed this course to provide each student with strong hands-on experience with data analysis, which is a strong requirement of this data-driven economy/world. R program is introduced and used thoroughly during ECO239 and 240. By the end of this year, students are expected to conduct fundamental data analysis comfortably by using R. By following up on the progress of learning closely in each class, we expect to increase the active participation and the solid comprehension of each content discussed in the classroom.

Course Requirements

	Requirements	Counts	Total Points
1	**Attendance Quiz ***	5	10 points
2	**Quiz****	2	10 points
3	**R Homework*****	1	10 points
4	**Midterm Exam**	1	30 points
5	**Final Exam**	1	40 points
6	**(Extra Point) **** Data Camp Projects**	5	5 points

*Attendance Quizzes
It will be a short quiz testing your comprehension of each class and the previous week's lecture as well as the attendance. There will be no make-up for these quizzes.
**2 Quizzes
These quizzes will cover the contents discussed in the earlier classes. These quizzes will be conducted unannounced. No make-up will be provided for these quizzes.
*** R-program based homework will be assigned. This year, this will be conducted individually, not as a group. Detailed instructions will be provided later.
**** This course will be supported by **DataCamp**. You will be assigned with several projects from

the DataCamp platform. Successful completion of the project will be awarded with up to 5 extra points.

Textbook
(Required) Download the textbook for FREE "OpenIntro Statistics 3rd Edition" from

https://www.openintro.org/stat/textbook.php?stat_book=os

(Optional) Paul Newbold, William Carlson and Betty Thorne, *Statistics for Business and Economics*, Seventh (Eighth) edition, Pearson Education, 2010 (2012).

R book
R ile Uygulamalı Analiz Yöntemleri – I   Murat Şirin
https://www.researchgate.net/profile/Selahattin_Sirin

Make-up Exam
No makeup exam will be given unless a legally acceptable document (such as medical report) is submitted. Validity of such document will be examined.

Grading
Grading is solely based on your performance of quizzes, assignments and exams. **No exception**.

Academic Misconduct
Please read the relevant material at http://www.plagiarism.org/. Detected plagiarism throughout the coursework will cause the student to be punished according to the University rules. The students are expected to know what plagiarism is and lack of knowledge is not an acceptable excuse.

Course Schedule

Week	Topic	OpenIntro	Section
Week 1	*Why Study Statistics?*		
Week 2	*Data Basics, Sampling*	Ch.1	1.2 – 1.4
Week 3	*Examining Numerical Data (1)*	Ch.1	1.6
Week 4	*Examining Numerical Data (2)*	Ch.1	1.6
Week 5	*Examining Numerical Data (3)*	Ch.1	1.7
Week 6	*Probability (1)*	Ch.2	2.1-2.2
Week 7	*Probability (2)*	Ch.2	2.3- 2.4
Week 8	**Midterm Exam**		
Week 9	*Probability (3)*	Ch.2	2.5
Week 10	*Discrete Probability Distributions (1)*	Ch.3	3.3
Week 11	*Discrete Probability Distributions (2)*	Ch.3	3.4
Week 12	*Continuous Probability Distributions (1)*	Ch.3	3.1
Week 13	*Continuous Probability Distributions (2)*	Ch.3	3.1
Week 14	*Continuous Probability Distributions (3)*	Ch.3	3.2
	Final Exam		