

Department of Economics  
Hacettepe University  
**ECO239 Statistics I**  
*Fall 2017/2018*

**Course Information**

<b>Instructor:</b>	Dr. Shihomi Ara-Aksoy
<b>Office:</b>	Department of Economics
<b>Email:</b>	sara@hacettepe.edu.tr
<b>Time/Place:</b>	<b>Tuesdays, 13:00-15:45, D6 (2), Wednesdays, 13:00-15:45, D7 (1)</b>
<b>Office Hours:</b>	Wednesday 11:30 – 12:30 or by appointment
<b>Course Website:</b>	<a href="http://www.shihomiaksoy.org">http://www.shihomiaksoy.org</a>

**Course Description/Objectives**

The purpose of this course is to introduce 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 the courses such as Statistics II and Econometrics. make sure to understand each concept clearly.

We have designed this course to provide each student 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 the progress of learning closely in each class, we expect to increase the active participation and the solid comprehension of each contents discussed in the classroom.

**Course Requirements**

	<b>Requirements</b>	<b>Counts</b>	<b>Points</b>	<b>Total Points</b>
<b>1</b>	<b>Quiz</b>	<b>5 times</b>	<b>3 points each</b>	<b>15 points</b>
<b>2</b>	<b>Group Assignment</b>	<b>2 times</b>	<b>10 points each</b>	<b>20 points</b>
<b>3</b>	<b>Midterm Exam</b>	<b>Once</b>	<b>30 points</b>	<b>30 points</b>
<b>4</b>	<b>Final Exam</b>	<b>Once</b>	<b>30 points</b>	<b>35 points</b>

**Important Note:** *If you are taking this course for the second (third) time and not being able to attend the class regularly, you have opportunity to take them between 15:45-16:00 at the classroom on the same day of the lecture you miss. Other kind of make-up will NOT be provided. **There will be NO make-up for quizzes.***

**Formation of Groups**

- Each group should contain maximum 4 students.
- I expect the same group to be sustained for all the assignments.
- No free-riders allowed. For each assignment/project, contributions of each member should be clearly/honestly declared.

- If you encounter any problem working as a group, bring the problem to the instructor ASAP.

### Textbook

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

[https://www.openintro.org/stat/textbook.php?stat\\_book=os](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).

### 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.

### Disabilities

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific need.

## Course Schedule

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