

AMERICAN UNIVERSITY OF BEIRUT
FACULTY OF ARTS AND SCIENCES
DEPARTMENT OF ECONOMICS - ECON 213

1. Course Learning Outcomes

This is a three-credit, introductory course in statistics designed to provide students with the basic concepts and methods of statistical analysis. It introduces the elementary statistical procedures used by researchers in the behavioral, health and social science professions and other related disciplines. This course teaches methods of descriptive and inferential statistics. It covers basic techniques in descriptive statistics, both analytical and graphical, including data collection and description. It also provides a study of probability theory and discusses the main topics in statistical inference, including confidence intervals, hypothesis testing, contingency tables and correlation and regression.

Throughout the course, students will learn many concepts, develop numerous skills, and gain new perspectives of events, observations, and data. The techniques and methods learned will help students in future courses, especially those in quantitative and analytical methods, and in solving real world problems.

2. Resources Available to Students

Mc Clave, Benson, and Sincich, *Statistics for Business and Economics*, 8th edition (7th is also valid).
Solutions Manual (available on the Reserve of the Jaffet Library).

3. Grading Criteria

There will be two exams and a final. The dates of the two exams are announced at the beginning of the semester, so that students can organize their schedules accordingly. They are worth 50 percent of the final grade, with 20 percent assigned to the lower of the two grades, and 30 percent allocated for the higher of the two grades. No make-ups are offered. The final exam is comprehensive and counts for 45 percent of the final grade. Class participation and attendance account for the remaining 5 percent. No exceptions will be made to this grading policy.

4. Schedule

<u>Week of</u>	<u>Topic</u>	<u>Chapter</u>	<u>Assignments</u>
1	Statistical data and thinking	1	
2	Methods for describing data	2	Problem Set 1
3	Probability	3	Problem Set 2
4	Probability	3	Problem Set 3
5	Discrete random variables	4	Problem Set 4
6	Exam I: November 7th	1-4	
7	Continuous random variables	5	Problem Set 5
8	Sampling distribution	6	Problem Set 6
9	Confidence intervals	7	Problem Set 7
10	Hypothesis testing	8	Problem Set 8
11	Exam II: December 19th	5-7	
12	Hypothesis testing	8	
13	Chi-square distribution	16	Problem Set 9
14	Regression analysis	10	

5. Course Policy

Students are expected to read the assigned chapters prior to their discussion in class. Class attendance is required. Students may be called to solve the assigned exercises and problems in front of the class. You will need a calculator to solve problems in this course. All calculators are acceptable, including graphical calculators, except for TI-92. Cellular phones should be turned off when entering the classroom. Students that miss more than six class hours will be dropped from the course.