TEL AVIV UNIVERSITY אוניברסיטת תל-אביב

Leon Recanati Graduate School of Business Administration

The Sofaer International MBA Program

Statistics for Business and Management

Course description

The ability to summarize data, understand data, and retrieve information from data in an effective way stands at the heart of successful business decision making. Statistics is a science that deals with various aspects of data presentation and analysis that are crucial for such processes. The course concentrates on two main branches of statistics: statistical inference and regression analysis. In the statistical inference part you will learn how to use samples to learn about characteristics of the population. The second part of the course is devoted to regression analysis, a framework that describes how a certain variable of interest can be explained and predicted by other variables. Throughout the course, Excel will be used extensively for demonstration and implementation of methods and tools. Special emphasis will be given to applications in various fields of business and management.

Objectives

The course first objective is to learn how to draw inferences about characteristics of a population using Excel. The course second objective is to learn to model data using regressions in Excel.

Brief content outline

Statistical inference: Meetings 1-9.
Regression: Meetings 10-12.
A detailed outline is provided below.

Teaching staff

Lecturer: Dr. Shlomi Zilca. Office hours TBA. Mailbox: 138, level 2. E-mail: shlomo.zilca@gmail.com
Tutor: Liron Sivan. Office hours TBA. Email: lirons@gmail.com

Texbook

"Contemporary Business Statistics," by Williams, Sweeney, and Anderson, 3rd ed., 2009. Publisher: South Western Cengage Learning. Detailed readings are provided below.

Meeting times

Monday 8:15–11:00
Wednesday 8:15–11:00

Assessment

The assessment consists of 6 individual assignments (18%), a group project (32%), and a final exam (50%). A detailed description of the assessments is provided below.

Detailed outline

Meeting	Meeting content	Textbook readings
1. Monday, Oct 18	• Introduction • Normal probability distribution • Sampling and sampling distributions	 • Chapter 6 section 6.2 • Chapter 7
2. Wednesday, Oct 20	• Sampling and sampling distributions	• Chapter 7
3. Monday, Oct 25	• Interval estimation	• Chapter 8
4. Wednesday, Oct 27	• Interval estimation	• Chapter 8
5. Monday, Nov 1	• Hypothesis tests	• Chapter 9
6. Wednesday, Nov 3	• Hypothesis tests	• Chapter 9
7. Monday, Nov 8	• Statistical inference about means and proportions with two populations	• Chapter 10
8. Wednesday, Nov 10	• Statistical inference about means and proportions with two populations	• Chapter 10
9. Monday, Nov 15	• Tests of goodness of fit and independence	• Chapter 12
10. Wednesday, Nov 17	• Regression	• Chapters 15, 16
11. Monday, Nov 22	• Regression	• Chapters 15, 16
12. Wednesday, Nov 24	• Regression	• Chapters 15, 16

Detailed assessment

The assessment is based on six individual assignments, a group project, and a final exam. All individual assignments are due on Wednesday, except the last which is due on Sunday. The individual assignments should be submitted as an Excel file, using Excel functions and formulas. Each problem should be answered on a separate Excel tab. Late submission of assignments will not be accepted. The Individual assignments and the group project should be sent by e-mail to Liron (lirons@gmail.com). The description, weight, and due time of the various assessments are provided below. Each assessment is marked out of 100.

Assessment	Assessment description	Due time	Weight
Assignment 1	Chapter 7, problems 11, 24, 33, 35, 45, 46.	Wednesday, 20:00, Oct. 27	3%
Assignment 2	Chapter 8, problems 20, 26, 37, 49.	Wednesday, 20:00, Nov. 3	3%
Assignment 3	Chapter 9, problems 5, 21, 29, 43.	Wednesday, 20:00, Nov. 10	3%
Assignment 4	Chapter 10, problems 6, 18, 24, 31.	Wednesday, 20:00, Nov. 17	3%
Assignment 5	Chapter 12, problems 6, 12, 37.	Wednesday, 20:00, Nov. 24	3%
Assignment 6	Chapter 15, problems 5, 10, 24, 31. Chapter 16, problem 16 d.	Sunday, 20:00, Nov. 28	3%
Group project	TBA	Tuesday, 20:00, Nov. 30	32%
Final exam	TBA	TBA	50%