



Academic Year 2016-2017
Syllabus
Course: Statistical tools for decision making
CFU 9
Prof. Roberto Rocci

Course Description

The course provides the basics of descriptive statistics and statistical inference, highlighting the potential applications in political, economic and social sciences.

Teaching Method

Classroom teaching, exercises, discussion of case studies.

Schedule of Topics

Topic 1	Univariate descriptive statistics: types of data; graphical representations; means; variability.
Topic 2	Bivariate descriptive statistics: contingency; correlation; simple linear regression.
Topic 3	Probability: elementary probability rules; random variables; common families of distributions; sampling distributions.
Topic 4	Statistical inference: point estimation; confidence intervals; statistical tests about hypotheses; multiple linear regression.

Textbook and Materials

Textbook

Alan Agresti, Christine Franklin, "Statistics: The Art and Science of Learning From Data"
Pearson; 3th International Edition, ISBN 9781447964186.

(Textbook sections: 1.1-2, 2.1-5, 3.1-4, 4.1-3, 5.1-4, 6.1-3, 7.1-3, 8.1-4, 9.1-6, 13.1-3)

Further reading

Alan Agresti, Barbara Finlay, "Statistical Methods for the Social Sciences", Pearson; 4th Edition.

Assessment

The final exam is a written test consisting of theoretical questions and exercises to be answered in 90 minutes. It is a closed book exam. Students are not allowed to consult any materials or other sources of information (including notebooks, laptops, dictionaries, mobile phones) during the exam.

MIDTERM EXAM

There is an elective midterm (written) exam. If a student passes the midterm exam and takes the final exam immediately after the course, then her/his final exam is only about the last topics discussed in the course and takes 45 minutes. The final grade is the average of the two grades obtained in the midterm and final exams. The laude is obtained if it is collected both in the mid and the final exam.

If a student does not pass/take the mid-term exam or rejects the mid-term grade, the final exam is to be taken as above (i.e. 90 minutes).

Office hours

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Office hours: by appointment.

NOTE: Since the course is provided for a limited number of students, **Erasmus students** who would like to attend this course and take this exam need to contact the Secretariat of Global Governance by e-mail global.governance@uniroma2.it for registration.
