

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Statistica - 2

2122-1-E3301M192-T2

Learning objectives

Economic disciplines study a variety of phenomena often showing different characteristics. The course provides a number of statistical methods to deal with such phenomena. Students will get the ability of locating and applying the suitable statistical method to describe single phenomena or their relations.

Contents

The course presents the main theoretical treatments of data which are typical for the univariate and bivariate descriptive statistics.

Detailed program

Statistics as a science

Applications of Statistics

The branches of Statistics

Summarizing univariate data

Data collection

Ratios of statistical data

Frequency distributions and graphical displays
Central tendency measures
Variability measures
Concentration measures
Skewness measures
Mathematical models for frequency distributions
Summarizing bivariate data
Main interpolation methods
The least squares method
The least square line and its properties
Bivariate frequency distributions
Independence and association measures
The regression function and the regression line
Concordance and correlation measures
References
M. Zenga, "Lezioni di Statistica Descrittiva", second issue, Gia
M. Zenga "Esercizi di statistica", Ed. Giappichelli, 1993
M. Zenga "Richiami di matematica", Ed. Giappichelli, 1992
G. Leti "Statistica descrittiva", Ed. Il Mulino, 1983.

Prerequisites

The concept of derivative of a function and the problem of maximization of a function must be known to students.

Giappichelli ed.

Teaching methods

6 cfu: 40 hours of theoretical lectures and 12 hours of practical lectures . (thesenotes may be change, as the present sanitary emergency evolves)

Assessment methods

A written theme consisting in practical exercises and comments about the results. If the score were positive, a theoretical talk would follow.

Textbooks and Reading Materials

(online) All that is posted in this e-learning website, about this course.

(offline) M. Zenga, "Lezioni di Statistica Descrittiva", second issue, Giappichelli ed.

- M. Zenga "Esercizi di statistica", Ed. Giappichelli, 1993
- M. Zenga "Richiami di matematica", Ed. Giappichelli, 1992
- G. Leti "Statistica descrittiva", Ed. Il Mulino, 1983.

Semester

Second Semester.

Teaching language

Italian