UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Experimental Plans for Marketing

2223-2-F7702M035-F7702M106M

Learning objectives

The course introduces to the design of experiments. Topics include practical issues, modelling, analysis of variance, graphical displays and interpretations of results. Students will get a solid foundation in some of the most important statistical models, a good experience in applying those models to data and interpreting results.

Contents

Experimental design, one and two-level factorial experiments.

Detailed program

The analysis of relations between variables.

A review of basic statistical inference.

Testing differences among several means; complete block experiments; two-level factorial experiments; two level fractional factorial designs.

Prerequisites

Basic statistics and inferential statistics.

Teaching methods

Lectures and exercises will be done in class.

Assessment methods

The exam is written and oral. The written exam consists of exercises, it measures students' ability in the application of concepts to solve simple practical problems. This part of the exam will be solved using Excel. The oral exam tests students' knowledge and understanding of the main concepts of the subject.

Textbooks and Reading Materials

For basic knowledge of inference, students can use books of previous courses, otherwise

G.W. Bohrnstedt, *Statistica per le Scienze sociali,* Il Mulino, Bologna, 1994 – Cap. I - II – III.

G. Cicchitelli, *Probabilità e statistica,* Maggioli, Rimini, 1984.

G. Cicchitelli, *Statistica Principi e Metodi*, Pearson Education, Milano, 2008.

For the detailed programm of this module:

O. Vitali, *Statistica per le scienze applicate,* Vol. I, Cacucci, Bari, 1999 – Cap.13.

J. Ledolter, *Testing 1-2-3-3*, Standford University Press, California, 2007- Cap. 1-2-3-4-

D.G. Montgomery, *Controllo statistico della qualità,* McGraw-Hill, Milano 2003 - parte III Cap. 10 e Cap. 11 fino al par. 11.2.3 incluso.

Subhash Sharma, *Applied Multivariate Techiques,* John Wiley & Sons, 1985, pag.1-6.

Semester

autum

Teaching language

italian

Sustainable Development Goals