



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Quantitative Analysis of Social Phenomena

2425-1-F8802N003

Aims

Knowledge and understanding; Applying knowledge and understanding

Contents

Scientific method. Mathematics, statistics and social research. Social research design. Regression function. Generalized linear regression model. Applications of regression analysis to social research. Statistical inference.

Detailed program

The course provides an advanced introduction to the logic and practice of the quantitative analysis of social phenomena. The first part illustrates the scientific method and its role in social research. The second part presents the basic elements of social research design. The third part focuses on regression analysis, here intended as a tool for describing variation in a given phenomenon of interest as a function of one or more characteristics of the objects of study. The final part is devoted to statistical inference, focusing on both the frequentist and Bayesian approach.

Prerequisites

Basic command of sociological theory and methodology, and fairly good skills in learning, writing and speaking.

Teaching form

The course consists of 56 hours of in-person lectures. Each lecture consists of a first part, in which the content of interest is presented (standard mode), and a second part, in which individual or group exercises, presentations, and discussions by the students take place (interactive mode). The proportion of standard mode and interactive mode varies from lecture to lecture. Overall, about 60 percent of the time is devoted to the standard mode, while 40 percent of the time is devoted to the interactive mode.

Textbook and teaching resource

Pisati M. (2010) «Incompresa. Breve guida a un uso informato della regressione nelle scienze sociali», *Rassegna italiana di sociologia*, vol. 51, n. 1, pp. 33-60.

Pisati M. (2003) *L'analisi dei dati. Tecniche quantitative per le scienze sociali*, Bologna: il Mulino.

Semester

First semester.

Assessment method

The examination can be carried out in two ways.

Participatory mode: It consists of carrying out a set of individual or group exercises during the course and presenting the results either orally (during lectures) or in written form, according to the instructions supplied by the lecturer on a case by case basis. Each exercise is graded, and all graded exercises are added together to determine the final grade. Access to this mode of examination requires regular and active participation in class, which will be verified by recording attendance.

Standard mode: It consists of taking a written test that requires answering four open questions on subjects taken from the teaching materials. The time available for the test is 60 minutes.

Office hours

By appointment only.

Sustainable Development Goals

QUALITY EDUCATION
