UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Business Statistics for Microeconomic Analysis

2324-3-E3301M214

Learning objectives

The course aims to present to students some statistical techniques, in order to use them to solve decisional problems in some economic disciplines.

Particular attention is paid to methodological aspects which can be encountered in economic analyses.

Contents

Elements of inference

Linear Models

Time Series

Detailed program

Prerequisites on inference. Sampling from normal distribution

Uni-variate linear regression

Bi-variate linear regression

Multivariate linear regression

Time series analysis. Introduction. Total and partial autocorrelation functions

Stationarity. Wold theorem

Specification of the parameters of ARIMA models

Destagionalization. Final comments

Prerequisites

Elements of asymptotic inference.

Teaching methods

28 hours of theoretical lectures (4 cfu)

Assessment methods

A technical report on a data set given by the teacher, written in ENGLISH or in ITALIAN, in which the SPSS code output is produced and deeply interpreted and commented, about one of the two following problems: selection of a linear model, Box-Jenkins time series. Then, a theoretical talk following these lines: to assess students' knowledge and understanding of the main concepts of the subject through theoretical questions and to test students' ability in the application of such concepts to solve simple practical problems, through the discussion of the produced output..

Following the guidelines for writing a syllabus, the exam consists of a CASE ANALYSIS, the description of a real situation or example, by analyzing the connections between the different elements or variables with respet to one or mode theoretical paradigms.

Textbooks and Reading Materials

Slides in the e-learning website. Nothing offline.

Semester

Second semester.

Teaching language

Italian

Sustainable Development Goals

QUALITY EDUCATION | INDUSTRY, INNOVATION AND INFRASTRUCTURE | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION | CLIMATE ACTION