

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

## **Business Statistics**

2425-3-E4101B022

## Learning objectives

The course aims to provide the theoretical knowledge, operational skills, and practical skills essential for surveying, analyzing, and processing economic data in order to interpret the underlying real-world phenomena related to business activity. The models and techniques presented (such as data measurement and synthesis techniques, endogenous and exogenous statistical sources, the business information system, and customer configuration) are intended to provide a high level of theoretical and applicative mastery with respect to statistical-economic topics by complementing previously acquired methodological skills. Ultimately, the course aims to provide the tools for statistical analysis of business data in order to trace them back to business decision support information.

#### **Contents**

- · Endogenous and exogenous statistical sources
- · The classificatory and definitional aspects
- Techniques for measuring and summarizing data
- Areas of application of statistics in the business environment
- · Classification of data in Business
- The system of enterprise accounts
- Analysis conducted on the basis of the most frequently used sources
- The corporate information system
- The Customer: external and internal
- Keys to reading data: dissemination and effective communication, Survey techniques,
- · Role play.

## **Detailed program**

- Introduction to the course.
- The classificatory and definitional aspects
- Techniques for measuring and summarizing data
- · Areas of application of statistics in business and Classification of Data in the Company
- The engineering sector
- Subjective forecasting and analysis
- The system of company accounts
- · Analysis conducted on the basis of the most widely used sources
- · Index of territorial potential
- Incentive system
- · Concentration and size
- · Archives and indicators
- The corporate information system and the Customer: external and internal
- · Organizational models
- · Introduction to small open and big data
- Keys to reading data: dissemination and effective communication, Survey techniques,
- · Role play.

## **Prerequisites**

None. Knowledge of topics covered in courses on multivariate statistical analysis, sample theory and economic statistics is recommended.

#### **Teaching methods**

Lectures, applications and role play.

#### Assessment methods

The examination consists of a written test which is followed by an oral test. The final grade is given by the arithmetic mean of the two tests.

For the written test

Time: 30 minutes

It consists of closed questions , open questions and exercises for extensive checking of preparation on the examination program.

For questions with closed questions with marks given in parentheses (1/30) these marks are used positively in case of a correct answer and negatively in case of an incorrect answer, non-answer carries the value 0. The sum of the marks in parentheses is 32.

The test is considered passed only if a grade of 18/32 is achieved.

Only the examination paper complete with answers must be handed in, no other papers used must be handed in.

#### For the oral test

The examination starts from viewing the written test and aims to ascertain the candidate's preparation in the subject area through questions and exercises.

# **Textbooks and Reading Materials**

- P. Mariani (2006)Fonti e geografie per la statistica economica, CLEUP.
- P. Mariani, (2002) La statistica in azienda, contesti ed applicazioni, FrancoAngeli.
- Guarini R., Tassinari F, (1997), Statistica economica, Il Mulino .
- PDF provided on the e-learning platform

#### **Semester**

Year of the course: 3 - 1rd period

# **Teaching language**

Italian

## **Sustainable Development Goals**

INDUSTRY, INNOVATION AND INFRASTRUCTURE