



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Market Analysis

2526-3-E4101B021

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#### Learning objectives

The course aims at providing the knowledge needed to conduct market research and analyse data from primary and secondary data sources, providing information supporting management decisions. By the end of the course, students are expected to acquire:

- the knowledge of the data sources that can be used to meet information needs;
- the knowledge of the stages of market research;
- the knowledge of the data collection techniques;
- the ability to apply statistical methods to data;
- the ability to interpret results and provide information supporting management decisions.

#### Contents

The course covers the statistical methods for market analysis, discussing the rationale behind the application of statistical methods to real business cases. The essential steps of a market research are discussed: definition of objectives, choice of sources of primary and secondary data, sampling design, collection of data, elaboration of data. The course also deals with the statistical analyses which are useful for market segmentation, brand positioning and launch of new products. The statistical techniques for baseline sales estimation are explored.

## Detailed program

### 1. Market research:

- a. definitions, purposes and limits of market research;
- b. data sources for market research;
- c. case studies related to market research;
- d. phases of market research.

### 2. Statistical surveys in market research:

- a. the sampling designs for market research;
- b. data collection methods and questionnaire design.

### 3. Statistical analysis of target market:

- a. market potential estimation by using the multiple linear regression, the Huff model and the decomposition methods;
- b. market segmentation with the hierarchical and non-hierarchical methods;
- c. brand positioning with the principal component analysis and correspondence analysis;
- d. launch of a new product by using the conjoint analysis;
- e. market tests;
- f. analysis of market share for a brand or product.

### 4. Statistical analysis of consumer buying behaviour:

- a. brand switching analysis;
- b. market basket analysis.

### 5. Time series analysis of sales data:

- a. estimation of baseline sales with decomposition methods;
- b. analysis of promotion effects on sales by using panel data models.

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## Prerequisites

A solid knowledge of multivariate statistics (cluster analysis, principal component analysis and multiple linear regression) and of the statistical software R are required.

## Teaching methods

The course consists of 42 hours, 30 of which are of frontal lessons in presence and 12 hours are of frontal remote lessons.

## Assessment methods

The assessment of learning outcomes consists of a written exam with open questions, closed-ended questions (with a positive score in case of exact response, null for a non-response and negative in case of wrong response), exercises and the interpretation of an output provided by the statistical software R. The written exam assesses the level of knowledge of the course topics, the ability to apply statistical methods for market analysis and the interpretation of results.

Assessment criteria.

The exam score is on a 30-point scale.

## Textbooks and Reading Materials

Textbook: Ricerche di marketing. Metodologie e tecniche per le decisioni strategiche e operative di marketing. Autori: L. Molteni, G. Troilo; anno di pubblicazione: 2022. Editore: Egea.

Recommended book: Analisi dei dati e data mining per le decisioni aziendali. Autori: S. Zani, A. Cerioli; anno di pubblicazione: 2007. Editore: Giuffrè.

## Semester

The course takes place in the second period of the second semester.

## Teaching language

Italian

## Sustainable Development Goals

QUALITY EDUCATION

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