



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Statistica Sociale

2627-2-E4104B015

Learning objectives

The aim is to give the tools for the analysis of social phenomena. Implementation of a survey, attitude scales and the basics of social indicators.

The class provides *knowledge and understanding* of:

- the management of a survey
- the analysis of variables in a questionnaire
- the construction of synthetic scales and indicators.

By the end of the course, the students will be able to:

- implement a questionnaire, define an attitude scale and create the evaluation measures, and choose and interpret the appropriate methods to create synthesis indicators (*Applying knowledge and understanding; making judgements*)
- Communicate and present the results of the analysis in a report (*Communication skills*).

The class allows the student to acquire a solid basis in the use of descriptive and exploratory statistics necessary in any works and which represent an essential basis for the continuation of the university course (*Learning skills*).

Contents

Tools for social research

- Questionnaire: structure and characteristics
- Attitude scales
- Social indicators

Detailed program

First part

- Opinion survey, data collection. Questionnaire design.
- Survey questions and response alternatives.
- Respondents and responses: Psychological and cognitive processes, phrasing
- Sensitive questions
- Question order effects and response order effects.
- Attitude scales: Bogardus, Guttman, Thurstone, Likert, Osgood.
- Example of scales: Sensation Seeking Scale (SSS), Test v-Lot-R, Buss Durkee Hostility Inventory – BDHI

Second part

- Human Development Indexes and Gap Indicators.
- Official international and national data base available through Internet.
- Illustrative scheme of the applied research: choice of a social phenomenon, sources; analysis, missing values analysis
- Raw data and construction of social indicators; check of the adequacy of the indicators; drafting a progress report.

Prerequisites

Statistics I

Teaching methods

Frontal and practical lectures. The first faces the theoretical aspects, the second shows through the use of national and international Open-Data, the different steps of a research: from the acquisition of data, the cleaning of the database, construction of indicators and scales, elementary analysis of results. Software Excel, R and SPSS.

Teaching with lectures, tutorials and laboratory activities:

- 30 h of lectures delivered in face-to-face mode
- 12 hours of exercises on attitude scales and composite indicators, in interactive face-to-face mode
- 24 hours of laboratory activities carried out in face-to-face interactive mode

All activities are delivered in person; no teaching hours are delivered remotely.

Assessment methods

The exam consists of a written test (concerning questionnaire and attitude scales) and one paper (concerning the part of the indicators), the oral exam is optional.

The written test concerns the first part of the programme (questionnaire and attitude scales) and includes both exercises and theoretical questions; the practical paper concerns the social indicators and is to be submitted before the exam session, as agreed with the lecturer. A written in-itinere test on the first part is offered during the teaching break (February). The optional oral exam covers the whole programme and is open to students who have obtained at least a pass mark in the combined written test and paper.

The theoretical questions in the written test allow verifying the knowledge of the questionnaire's problems, the scales/synthetic indicators plan and implement and their main characteristics. The exercises allow verifying the ability to choose, calculate and comment indicator/ scale with simple practical problems. Furthermore, the theoretical questions and the exercises allow verifying the ability to express themselves with an appropriate technical language.

Marks are expressed out of thirty. The final mark is the weighted average of the written test and the practical paper (written 2/3, paper 1/3); access to the optional oral requires a pass mark (18/30) in the combined written test and paper. In the written test, theoretical questions assess conceptual mastery and command of technical language, while exercises assess the correctness of the procedure, the application of the method and the interpretation of results; the paper assesses the appropriateness of methodological choices, the correctness of the analyses and the clarity of presentation. Marks of 18–23 correspond to sufficient preparation with gaps or inaccuracies; 24–27 to good and broadly correct preparation; 28–30 cum laude to excellent preparation, with full critical autonomy and command of technical language. The optional oral may raise or lower the final mark.

Textbooks and Reading Materials

- Vanda Zammuner (1998), *Tecniche dell'intervista e del questionario*, il Mulino, Bologna
- Handbook on Constructing Composite Indicators METHODOLOGY AND USER GUIDE, OECD, European Commission, 2008 (pag. 19-33; pag. 44-49; pag. 83-88, pag. 102-104). Available at the following link: https://www.oecd.org/en/publications/handbook-on-constructing-composite-indicators-methodology-and-user-guide_9789264043466-en.html.
- Teaching material made available during the lessons on e-learning

Semester

Annual, 1st and 2nd semester, 2nd and 3rd cycle (approximately from late November to mid-April)

Teaching language

Italian

Sustainable Development Goals

QUALITY EDUCATION
