



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Quantitative Research Methods

2526-1-E4002N006

Learning objectives

Knowledge and Understanding

To provide knowledge about the assumptions, stages, and tools underlying quantitative research in social sciences, contextualized from both epistemological and methodological perspectives.

Applying Knowledge and Understanding

To develop the ability to correctly identify and implement the fundamental steps of a survey-based research process.

Independent Judgment

To encourage critical reading of available quantitative data on social phenomena, the sources from which they originate, and their reliability.

Communication Skills

To enable students to accurately report and interpretively discuss the results of quantitative research.

Learning Skills

To promote a critical analytical attitude toward quantitative data on social reality and to foster their questioning as a means of deeper analytical understanding.

Contents

The course aims to provide the epistemological and methodological framework within which quantitative research in the social sciences is situated, and to develop basic skills for correctly implementing all the fundamental steps of a survey-based study.

Finally, the course offers a preliminary introduction to the issues of causal inference and multivariate data analysis.

Detailed program

The course begins by contextualizing social research within the broader framework of scientific inquiry.

It then reviews the variety of paradigms and methods that characterize research in the social sciences, aiming to identify the correspondence between quantitative research, on the one hand, and “sociological genres” and positions within key disciplinary debates, on the other.

After presenting the main techniques of quantitative research, the course focuses on the survey, illustrating its phases and the choices the researcher must make, while reflecting on the implications of those decisions.

As the stages of survey research are revisited, students put into practice the fundamental steps required for its implementation, developing practical skills along the way. In particular, attention is given to:

i. formulating the research question and defining the research design; ii. identifying the sample and the method for reaching it; iii. constructing the questionnaire; iv. coding and conducting univariate and bivariate data analysis; v. writing a quantitative research report.

Finally, the course introduces - at a preliminary level - two interrelated and highly relevant topics for quantitative research: causal inference and multivariate data analysis.

Prerequisites

None.

Teaching methods

The course is based on lectures (approximately 70% of total hours, delivered as traditional teaching), alternated with practical exercises, group discussions, and a collaborative group project (interactive teaching, 30% of total hours).

Lectures will be held in Italian, in person, and will not be recorded. Occasional sessions may be held online, with prior notice from the instructor.

All slides and materials used during class will be made available on the e-learning platform. Students are strongly encouraged to review them and integrate them into their study of the assigned texts.

Assessment methods

The final assessment consists of a written exam with multiple-choice and open-ended questions. The exam covers the knowledge provided during the course and also requires the application of the skills developed throughout the teaching activities. An oral integration of the written exam grade may be requested either by the instructor or by the student. No midterm assessments are scheduled.

Textbooks and Reading Materials

Students are strongly encouraged to review the lecture slides uploaded to the course's e-learning page.

The slides also help guide the study of the exam readings in the appropriate sequence, ensuring the logical flow

that connects them and will be followed during lectures.

Manuals

S. Stefanizzi, *Il ragionamento Sociologico. Questioni metodologiche ed esempi di ricerca*, Milano – McGraw Hill, 2019 – chapters 1 to 4 inclusive + paragraph 5.5.2 and related in-depth sections + chapter 7

M. Lucchini, *Metodologia della Ricerca Sociale*, Milano – Pearson, 2024 – chapters 3 to 9 inclusive

Supplementary chapters for in-depth study

The following chapters are available as printed handouts, which can be requested from the instructor or collected at the FronteRetro copy shop (viale Sarca, 191).

Chapters are listed in alphabetical order, BUT this is not the order in which they should be studied (see the note above).

From Abbott A., *I metodi della scoperta. Come trovare buone idee nelle scienze sociali*, Milano – Paravia Bruno Mondadori, 2007: chapter 2 “Dibattiti fondamentali e pratiche metodologiche”

From Bagnasco, A., *Prima Lezione di Sociologia*, Bari-Roma – Laterza, 2015: chapter 4 – “Generi Sociologici”

From Barbera, F. and Pais, I. (eds.), *Fondamenti di Sociologia Economica*, Milano – Egea, 2017: chapter 15 “Inferenza causale e approccio controfattuale” (by Argentin G.)

From Bosco, A., *Come si costruisce un questionario*, Roma – Carocci, 2003: chapter 1 “Il formato delle domande nel questionario”

From Caselli, M., *Indagare col questionario. Introduzione alla ricerca sociale di tipo standard*, Milano – Vita e Pensiero, 2010: chapter 6 “La costruzione del questionario”

From Corbetta, P., Gasperoni, G., and Pisati, M., *Statistica per la Ricerca Sociale*, Bologna – Il Mulino, 2001: chapter 7 “Introduzione all’analisi multivariata” (by Pisati, M.)

From Sarti, S., *Il Caso e la Società. Il ruolo del caso nei fenomeni umani e sociali*, Torino – UTET Università: chapter 4 “Imprevedibilità e prevedibilità nei destini individuali e sociali” (excluding section 4.4)

Sustainable Development Goals

REDUCED INEQUALITIES
