



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Quantitative Research Methods (blended)

2223-1-E4001N077

Learning objectives

The main objective of the course is to transmit the preliminary knowledge of the logic of the sociological reasoning. In particular, the intent is to make known the social research, the epistemological principles, the rules underlying the scientific research and the different techniques available to a social researcher to achieve the desired cognitive objectives.

By the end of the course, the student will be able to identify and transform a social problem into a sociological question, define the appropriate research design and set up the appropriate tools to address it from the perspective of quantitative social research.

Contents

The course is aimed at students who are approaching social research methodology for the first time. It introduces the main theoretical and methodological approaches in the analysis of social phenomena and shows the link between the epistemological principles of sociological knowledge and empirical research. In particular, issues related to the methodological aspects of the research process are addressed: the nature of scientific problems, the different perspectives in the way social sciences are conceived (the definition of the nature of reality, the relationship between the researcher and the object of the study, the type of scientific language used and the assumptions which to start the research process from), the phases of the research design, the introduction to the main methods and techniques of data collection, such as the sample survey, and, finally, the national and international data sources available today for social research and the logic of the secondary analysis.

Detailed program

The course is divided into four parts:

First part: epistemological principles of scientific knowledge. The epistemological debate on scientific knowledge. The two perspectives of scientific development of Karl Popper and Thomas Kuhn. The sociological reasoning. The sociological view: how to deal with social phenomena in research questions. Explaining and interpreting: the paradigms at the basis of scientific knowledge. The Durkheim methodology. Weber's "understanding" sociology. Phenomenology and ethnomethodology.

Second part: the logic of social research. Scientific knowledge and method. Theory and social research. Hypotheses. The research process: materials and tools.

Third part: The empirical work: the translation of methodological principles into practice. The construction of a quantitative research design. The preparation of the observation plan. The sample scheme. The survey tool: the questionnaire. Construction and administration of a questionnaire.

Fourth part: The logic and problems of secondary analysis. The sources of data for social research. The monivariate analysis.

Prerequisites

There are no preliminary requirements for the course.

Teaching methods

Unless otherwise specified in the Covid-19 emergency, the course consists of **30 hours** of **face-to-face lectures** and **33 hours** of training in **blended learning** mode. The blended learning didactics includes a series of activities such as web conferences, guided exercises, self-assessment tests, online office hours.

For those students who cannot attend in-person classes, remote discussion and video-recorded lectures are provided.

The course is delivered in **Italian language**.

Any student who performs all the planned activities during the course **meeting the required deadlines** is considered a *frequent attendee*. Therefore, to be considered a *frequent* student, it is not necessary (**but strongly recommended**) to attend in-person classes.

Assessment methods

The course includes a series of **exercises** (marked with the letter E) and **tests** (T) to allow the student to assess the degree of learning of the topics addressed during the course.

The student will be able to carry out each **exercise** (E) for a maximum number of **3 times** (unless otherwise indicated), within the indicated time frame. At the end of each attempt the student will be indicated any wrong answers and the respective solutions.

Each **test** (T), on the other hand, can be **repeated 2 times** (unless otherwise indicated), within the time indicated. The scores of each test will contribute to the formation of the final score as follows:

- The student may take the test once or twice. The final score of the test will be equal to the **average of the two attempts**;
- The **final score** for all the tests will be equal to the **average of the scores** obtained in each test.

Depending on the final score the student will get a bonus from 1 to 3 points which will be added to the written test score. The bonus is calculated as follows:

- Final score = 0-54 - **No bonus**
- Final score = 55-69 - **1 point**
- Final score = 70-84 - **2 points**
- Final score = 85-100 - **3 points**

The evaluation at the end of the course will take place with a **written examination**. Unless otherwise indicated regarding the Covid-19 emergency, exams will be in-person.

Assessment at the end of the course will be by a **written examination**, as follows:

- **Close-ended test** (multiple-choice): the student will be asked to identify the correct answer from those listed. The test will cover the topics covered in class and within the reading materials. If the student does not achieve a passing grade (18/30) in the test, he/she will not be allowed to proceed to the next section (*Open Questions*)
- **Open questions**: the student will be asked to develop a reasoned response to one or more epistemological and/or methodological questions addressed during the course

Please note that either the lecturer or the student has the option of requesting an **optional oral examination** that will focus on the written exam and topics covered in the course.

Textbooks and Reading Materials

1. Stefanizzi, S., *Il ragionamento sociologico. Questioni metodologiche ed esempi di ricerca*, McGrawHill, Milano, 2019. Second edition (cap. 6 excluded)

Except for the book, other texts will be available in electronic format within the blended platform.

For students enrolled in academic years before 2017/2018:

1. Stefanizzi, S., *Il ragionamento sociologico. Questioni metodologiche ed esempi di ricerca*, McGrawHill, Milano, 2019. Second edition (cap. 6 excluded)
2. Bailey K. D., *Metodi della ricerca sociale. Vol.II. L'inchiesta*, il Mulino, Bologna, 2006

Sustainable Development Goals
