

## COURSE OF STUDY: L-39 -L-40 – SOCIAL SERVICE SCIENCES AND SOCIOLOGY. – SOCIOLOGY. (L-40)

**ACADEMIC YEAR : 2023-2024**

**ACADEMIC SUBJECT: Data analysis for social research**

General information	
Year of the course	2023-2024
Academic calendar (starting and ending date)	I semester (18 september 2023 – 7 december 2023)
Credits (CFU/ETCS):	8
SSD	SECS-S/05 Social Statistics
Language	Italian
Mode of attendance	Attendance, although not compulsory, is highly recommended.

Professor/ Lecturer	
Name and Surname	Thaís García Pereiro
E-mail	t.garcia.pereiro@uniba.it
Telephone	-
Department and address	Dipartimento di Scienze Politiche
Virtual room	Teams. Dedicated Teams code: odijxvp
Office Hours (and modalities: e.g., by appointment, on-line, etc.)	In presence, or via Teams at the on Monday from 11:00 to 13:00. For a better organization, interested students are requested to send an e-mail or a message from Microsoft Teams to the professor in advance, to agree on the day and time of the tutoring. Consult the web page: <a href="http://www.uniba.it/it/ricerca/dipartimenti/scienze-politiche/docenti">www.uniba.it/it/ricerca/dipartimenti/scienze-politiche/docenti</a>

Work schedule			
S(L40)/SSS(L39)-Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
200	40	24	136
S(L40)/SSS(L39)-CFU/ETCS			
8	5	3	

Learning Objectives
<p>The central objective of this course is to provide students with practical and operational skills, concerning the identification, measurement, detection and processing of quantitative data relevant (from primary or secondary source) for the analysis of the socioeconomic, socio-cultural and socio-demographic phenomena.</p> <p>The course offers a solid and applicative preparation related to the most relevant techniques, tools and methodologies of quantitative analysis, as well as a competence in applying these methods to a wide range of social phenomena observable in reality.</p> <p>The student will also acquire the ability to interpret the results obtained (both from his own research and from research conducted by other subjects) and will develop his own critical spirit with regard to the mapping of the available data</p>

	<p>and the reading and construction of printouts and graphs, also produced by third parties, for the analysis of social phenomena. Furthermore, the student will acquire the ability to apply different statistical methodologies and to interpret the results obtained, not only from an empirical point of view but also in the field of policies, to provide useful information on the decisions to be implemented in certain situations and, in some way, predict the political and social implications of the actions planned and implemented in these areas.</p> <p>Students must therefore be able to apply the knowledge acquired in this course to analyze the opportunities and criticalities of the environment in which they operate, processing adequate identifications, collections and analysis of quantitative data.</p>
<b>Course prerequisites</b>	Basic knowledge of demography and statistics.
<b>Teaching strategy</b>	Lectures with the aid of slides (PPT), thematic workshops, exercises (practical applications and case studies).
<b>Expected learning outcomes in terms of</b>	
<b>Knowledge and understanding on:</b>	<ul style="list-style-type: none"> <li>• Explain the principles and objectives of quantitative research in the social sciences;</li> <li>• formulate research questions and design appropriate research;</li> <li>• demonstrate an understanding of quantitative research methods;</li> <li>• identify the appropriate quantitative techniques for the different types of research questions according to the availability of data;</li> <li>• critically read and interpret the results of empirical research.</li> </ul>
<b>Applying knowledge and understanding on:</b>	<ul style="list-style-type: none"> <li>• Apply the understanding of quantitative research methods concerning contemporary issues in the social sciences;</li> <li>• communicate scientifically and follow the development of knowledge within their field of study by better understanding the research disseminated by the media and critically analyzing the studies presented;</li> <li>• write a quantitative research proposal and be autonomous in its approach;</li> <li>• select among the data analysis techniques (quantitative) the one most suitable for answering the research questions.</li> </ul>
<b>Soft skills</b>	<ul style="list-style-type: none"> <li>• Demonstrate the ability to work as a team to form study groups and respond to assigned tasks;</li> <li>• organize and manage effectively not only the time dedicated to the study but also the projects to be completed in order to acquire and improve the ability to correctly apply the methods studied;</li> <li>• be able to find reliable sources and extrapolate the necessary information;</li> <li>• frame the solutions to the identified problems and make decisions based on the information collected, trying to identify the best path to propose a solution based on such evidence.</li> </ul>
<b>Syllabus</b>	
<b>Content knowledge</b>	<p>This course focuses on the in-depth study of applied quantitative research techniques and tools within the social sciences and includes the development of topics covering the basics of scientific research in the social sciences, research design, data collection and I " analysis of data collected from different sources. In discussing each topic, quantitative empirical applications to social research are considered in particular. Therefore, the teaching approach of this course is based on the strategy of learning by doing (learning by doing) - in class, and in carrying out workshops, practical seminars and written assignments.</p> <p>The course accompanies students towards the understanding and critical evaluation of the concepts and methods of quantitative research applied to the social sciences, by reading, analyzing and discussing articles that use</p>

	<p>quantitative methods to answer relevant questions in this thematic area. In particular, each topic will include lectures, workshops, practical seminars and classroom discussions that explain the different themes, which are accompanied by the reading of empirical articles that apply the topic specifically to social phenomena.</p> <p>Program:</p> <p>I. UNDERSTANDING SOCIAL RESEARCH</p> <p>the. Visualization of social research: scientific knowledge in the social sciences (logic and evidence, theories and observations); the rules and phases of the scientific method.</p> <p>ii. Understanding the process of empirical research: theoretical and epistemological starting points; the logic in the research process; the structure of social research.</p> <p>iii. Quantitative research in the social sciences: research purposes; the questions; time and validity in social research; population and sample; statistical generalization; exploratory, descriptive and inferential analysis.</p> <p>iv. Literature review (practical seminar).</p> <p>v. Choose and narrow your search problem (practical seminar).</p> <p>II. MAPPING AND COLLECTION OF QUANTITATIVE DATA</p> <p>the. Macro and micro-data: recognize and process aggregate (macro) and non-aggregated (micro) data.</p> <p>ii. Data from secondary sources: sources and availability; advantages and disadvantages.</p> <p>iii. National and international sources of secondary data (practical seminar).</p> <p>iv. Primary source data: survey design; types of sampling; data collection, construction of the questionnaire; creation of the dataset and primary data processing.</p> <p>v. Recognizing units of analysis and variables (practical seminar): types of data; attributes, values and levels; measurement problems; operationalization; matrix, encoding and recoding.</p> <p>III. USE AND ANALYSIS OF QUANTITATIVE DATA</p> <p>the. Construction of tables and graphs.</p> <p>ii. Monovariate analysis.</p> <p>iii. Bivariate analysis.</p> <p>iv. Multivariate analysis: cluster analysis, linear regression models, binary logistic regression models.</p> <p>V. WORKSHOP "Writing-up: reporting the results of a social research with quantitative methods".</p> <p>VI. WORKSHOP "Writing-up: preparing a social research proposal with quantitative data".</p>
<b>Texts and readings</b>	The teaching material will be made available by the teacher during the course.
<b>Notes, additional materials</b>	<p>Supplementary material regarding the themes of interest for research in social sciences please refer to the following links:</p> <p><a href="https://www.neodemos.info/">https://www.neodemos.info/</a></p> <p><a href="http://www.sieds.it/index.php/page-rieds-home-page/">http://www.sieds.it/index.php/page-rieds-home-page/</a></p> <p><a href="https://sociologiaitaliana.egeaonline.it/it/21/archivio-rivista">https://sociologiaitaliana.egeaonline.it/it/21/archivio-rivista</a></p>
<b>Repository</b>	The teaching material will be available to all students (upon request and / or registration to the dedicated Teams, registration that remains updated even for students who have already passed the exam - except after abandonment of the Teams or any request for cancellation).
<b>Assessment</b>	
Assessment methods	<p>Written assignments (in itinere) and oral interview (final evaluation).</p> <p>Written assignments (carried out in itinere) to be presented during the oral</p>

	<p>interview (final evaluation). The method aimed at verifying the expected learning outcomes is represented by the oral presentation of brief written assignments, which consist of a series of exercises related to the teaching program. These tasks are discussed together with the professor on the day settled for the final evaluation (oral interview). The final grade is based on how much the tasks and justifications of the choices made by the student reflect: the knowledge of the program; precision in exposition and argumentation; the ability to elaborate and autonomy of judgment of the acquired knowledge, also in relation to the methodologies for the observation and description of the characteristics of the social, demographic, economic and / or cultural phenomena under analysis.</p>
<p>Assessment criteria</p>	<ul style="list-style-type: none"> <li>• Know and understand the different teaching contents through the exposure of the theoretical and practical skills acquired.</li> <li>• Analyze and synthesize information from different sources.</li> <li>• Continuous learning, indicating the most appropriate techniques aimed at analyzing data and social phenomena with quantitative tools.</li> <li>• Problem solving, through the application of the correct tools to deal with typical situations, critically interpreting the results obtained.</li> <li>• Critical thinking, interpreting information with a critical sense and making congruent and well-argued decisions based on empirical evidence.</li> <li>• Communicate information and ideas in a clear and formally correct form.</li> <li>• Work in a group and develop organizational and planning skills to carry out the exercises and activities foreseen in the course.</li> </ul>
<p>Final exam and grading criteria</p>	<p>The final grade is assigned in thirtieths. The exam is passed when the mark is greater than or equal to 18. The criteria followed for the evaluation of learning outcomes expressed in thirtieths are:</p> <p><u>Insufficient: 0-17</u> Lacking, incomplete and inadequate knowledge of the topics contained in the program, inadequate exposition and argumentation skills, also with reference to the technical and conceptual lexicon of the discipline by the candidates, insufficient processing skills and autonomy of judgment.</p> <p><u>Sufficient: 18-20</u> Sufficient knowledge of the topics contained in the program, overall adequacy of the methods of expression and argumentation, also with reference to the technical and conceptual lexicon of the discipline, elementary processing skills and autonomy of judgment.</p> <p><u>Fair: 21-23</u> Discrete knowledge of the topics contained in the program, appreciable ability to use modes of expression appropriate to the technical and conceptual lexicon of the discipline, discrete ability to argue, elaborate and connect between the various topics.</p> <p><u>Good: 24-26</u> Good knowledge of the topics contained in the program, good in-depth skills and autonomy of judgment, verifiable also through the use of methods of expression decidedly appropriate to the technical and conceptual lexicon of the discipline.</p> <p><u>Very good: 27-28</u> More than good knowledge of all the topics contained in the program, ability to deepen, connection between the different topics, critical autonomy and very good judgment and mastery of the methods of expression of the technical and conceptual lexicon of the discipline.</p> <p><u>Great: 29-30</u> Great knowledge of all the topics contained in the program, great ability to deepen, link between the different topics, as well as critical autonomy and in-depth mastery of the methods of expression of the technical and conceptual</p>

	lexicon of the discipline. <u>Excellent: 30L</u> Excellent knowledge of all the topics contained in the program, excellent ability to deepen, link between the different topics, as well as critical autonomy and complete mastery of the methods of expression of the technical and conceptual lexicon of the discipline.
<b>Further information</b>	
	.