

Syllabus

Course Description

Course Title	Social statistics
Course Code	17319
Course Title Additional	
Scientific-Disciplinary Sector	STAT-03/B
Language	Italian
Degree Course	Bachelor in Communication Sciences and Culture
Other Degree Courses (Loaned)	
Lecturers	Prof. Giulia Cavrini, GCavrini@unibz.it https://www.unibz.it/en/faculties/education/academic-staff/person/13718 dr. Evan Tedeschi, Evan.Tedeschi@unibz.it https://www.unibz.it/en/faculties/education/academic-staff/person/37256
Teaching Assistant	
Semester	First semester
Course Year/s	1
CP	6
Teaching Hours	45
Lab Hours	0
Individual Study Hours	105
Planned Office Hours	18
Contents Summary	This course aims to introduce students to statistical reasoning and to equip them with the tools needed to understand and analyse social phenomena using quantitative methods. It covers the fundamentals of statistical logic, variable classification, techniques for data summarisation and comparison, the analysis of relationships between variables, and the use of social indices and indicators. In addition, the course provides students with the

	statistical and IT tools necessary to analyse data collected through active learning activities (e.g. exercises).
Course Topics	<p>During the course, the following topics will be covered:</p> <ul style="list-style-type: none"> - Introduction to statistical methodology and descriptive statistics. - Definition of variable, statistical unit, population, and sample. - Statistical description of a group: from data collection to the data matrix. - Frequency distribution of a variable and its graphical representation. - Measures of central trend and position. - Measures of variability. - Analysis of the association between two variables: the two-way table. <p>In addition, students will be provided with the necessary statistical and IT tools for analysing the collected data. Some lessons will be dedicated to data analysis using Excel. In particular, students will learn how to:</p> <ul style="list-style-type: none"> - set up the data matrix; - manipulate variables and cases, including recoding, case selection and distinct analyses. - Conduct a univariate analysis, calculating summary and variability measures, and creating frequency distributions and graphs. - Conduct a bivariate analysis by constructing double-entry tables.
Keywords	Definition of variable; Simple and joint frequency distributions; Means; Variability; Definition of Association.
Recommended Prerequisites	Basic mathematics knowledge acquired during high school.
Propaedeutic Courses	
Teaching Format	The course consists of in-person 45 hours of lectures and exercises, during which the professor will present the various topics. The lecture content will be delivered using PowerPoint presentations, which will be made available to students on TEAMS. All sessions follow a mixed approach: traditional lecture-based teaching alternates with interactive learning moments, with proportions varying depending on the topic and the type of activity carried out. Typically, the interactive component will be more prominent during exercises.
Mandatory Attendance	In accordance with the regulation

Specific Educational Objectives and Learning Outcomes	<p>The aim of the course is to ensure that students acquire a solid understanding of both the methodological and applied fundamentals of statistics, relevant to the statistical study of social phenomena. Students will develop the ability to identify and apply the appropriate statistical tools for describing individual phenomena or the relationships between multiple phenomena.</p> <p>Knowledge and Understanding. Students will gain knowledge of and understand the fundamental concepts of descriptive statistics in order to produce data summaries that highlight the key features of the data.</p> <p>Applying Knowledge and Understanding. Students will learn to apply the methodologies introduced during the course to socio-demographic data.</p> <p>Independent Judgment. Students will develop strong independent judgment skills and learn to identify the most methodologically appropriate techniques to answer specific questions, based on empirical evidence provided by the data.</p> <p>Communication Skills. Students will learn to use technical statistical terminology appropriately and effectively, in order to clearly communicate the conclusions drawn from their data analyses.</p> <p>Learning Skills. A solid understanding of fundamental statistical concepts will enable students to independently continue their learning in this discipline.</p>
Specific Educational Objectives and Learning Outcomes (additional info.)	
Assessment	<p>The course examination consists of two parts:</p> <ul style="list-style-type: none"> - A theoretical part, which will be assessed through a written test containing questions and exercises aimed at verifying both the knowledge and understanding of the course topics, as well as the ability to apply this knowledge to practical cases. - A practical part, assessed through Excel exercises. In this part,

	<p>students will be required to analyse a dataset, answer the given questions, and describe the results obtained.</p>
Evaluation Criteria	<p>The final grade will be the weighted average of the written exam (5/7) and the practical assessment (2/7). Both parts must be passed in order to pass the exam.</p> <p>Additionally, two in-course (optional) assessments will be held during the semester. Passing both of these (one of which will include the practical part) will count as the final grade, which will be calculated as the weighted average of the two assessments, according to the criteria outlined above. If one of the two partial assessments is not passed, it may be retaken during the final exam.</p> <p>In any case, students may take the final exam if the grades from the in-course assessments are not considered satisfactory.</p> <ul style="list-style-type: none"> - The evaluation criteria for the written exam are: accuracy of the answers provided, appropriateness of comments in sections requiring personal interpretation, and knowledge of the methods needed to solve the proposed exercises. - The evaluation criteria for the practical assessment are: knowledge of the software and techniques required to solve the proposed task, and the adequacy of the interpretation of the results obtained.
Required Readings	<ol style="list-style-type: none"> 1. M.K. Pelosi, T.M. Sandifer, P. Cerchiello, P. Giudici <i>Introduzione alla statistica</i>, McGraw Hill, 2009 seconda edizione (capitoli 0 - 4). 2. P. Poli <i>EXCEL 2019. Formule e analisi dei dati</i>. Hoepli Informatica. <p>Notes will also be provided by the lecturers.</p>
Supplementary Readings	
Further Information	
Sustainable Development Goals (SDGs)	Quality education