General information	
Academic subject	Inference and Sampling Techniques
Degree course	Bachelor
Academic Year	II
European Credit Transfer and Accumulation System (ECTS)	SECS-S/01
Language	Italian
Academic calendar (starting and ending date)	I Semester
Attendance	No

Professor/ Lecturer	
Name and Surname	Samuela L'Abbate
E-mail	samuela.labbate@uniba.it
Telephone	
Department and address	Department of Economics, Management and Business Law, 5th floor and room 54
Virtual headquarters	
Tutoring (time and day)	By appointment to be booked by email

Syllabus	
Learning Objectives	Acquire knowledge of inferential statistics and sampling techniques and be able to apply them with those of descriptive statistics to cognitive sample surveys
Course prerequisites	The student must have acquired the knowledge of Descriptive Statistics (Statistics I)
Contents	Introductory notions to statistical inference Random variables and their distributions Logic and techniques of inference Population, sample, parameters and estimators The sample surveys shall: - The main sampling plans - Selection of sample units - Estimated total: main estimates - Procedure for estimating the total in simple random sampling - Other estimates of the total: by difference, by quotient and by regression - Efficiency comparisons Problems of inference on averages Problems of inference on percentages Comparison between samples
Books and bibliography	- G. GIRONE, C. CROCETTA, A. MASSARI. Statistica, Bari, Cacucci, 2019. - S. MONTRONE - M. CRISTALLO, Tecniche di Campionamento (Lezioni), Ed. Arte Print, Matera, 2007
Additional materials	

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Hours			
64	64		
ECTS			
8			

Teaching strategy	
	Frontal Lectures and Applications
Expected learning outcomes	
Knowledge and understanding on:	The student of Inference and Sampling Techniques must have acquired the knowledge of descriptive statistics, planned in 1st year of Bachelor's degree aimed at ensuring the acquisition of statistical concepts fundamental, in order to continue profitably in the study of inferential statistics for Marketing. In particular the basic training will be integrated tutorials on probability, sampling and estimation problems, possibly with the help of Excel.
Applying knowledge and understanding on:	The skills acquired, both from a theoretical and practical (including through participation in significant activities of problem solving), tend to form a student who will be able, on the one hand to make a fundamental contribution to the design statistical surveys, and to apply their knowledge to the analysis of statistical data. The analyses carried out will be oriented towards building probabilistic samples and estimation of parameters in solving problems of market analysis.
Soft skills	• *Making informed judgments and choices* Subject Inference and Sampling Techniques provides adequate knowledge of techniques and methodologies and practical and operational skills that ensure autonomy of judgement in carrying out analysis on the measurement and management of phenomena, data collection, data processing and interpretation of data relating to business issues and market analysis. The student develops his own autonomy of judgment by participating in the discussions and interventions requested by the lecturer during the frontal lectures as well as through individual and group meetings and discussions with the faculty members of the degree program. In addition, participation in laboratory activities and the construction of individual and group work will allow to evaluate, autonomy of judgment, critical spirit, and aptitude to work in groups. • *Communicating knowledge and understanding* At the end of the course, the student must have the appropriate skills and tools necessary for the correct transmission of statistical information to both specialist and non-specialist subjects, both in written and oral form, including through the use of the main applications reporting software. The ability to synthesise and interpret the results of statistical analysis will also be developed during training activities involving written reports and oral presentation of group and/or individual work outcomes on topics consistent with the training course. • *Capacities to continue learning* The didactic pathway provides gradual progression in training starting from the basic disciplines already acquired in the 1st cycle (descriptive statistic) and then continuing during the course by applying statistical inference techniques using computational tools in individual and/or group activities. At the end of the training course, the student must have developed the learning skills necessary to undertake further studies in subsequent training processes and to fit into different working contexts with a good level of autonomy and skills that enable him to have the skills of adapt and update continuously.

Assessment and feedback	
Methods of assessment	Written exam and oral interview with simultaneous correction of the written test.
Evaluation criteria	- Knowledge of program content and ability to report lessons learned;

	- Connection capacity between the contents of the program; - Ability to re-elaborate the acquired knowledge personally and critically; - Expressive use of, in particular, specialized terminology.
Criteria for assessment and attribution of the final mark	The assessment will be defined on the basis of a global quality level of exposure. In particular: **Level - Voto** Null n.c. - Gravely inadequate 7 - 11 Inadequate 12 - 17 Sufficient 18 - 21 Good 22 - 24 Very Good 25 - 27 Excellent 28 - 30
Additional information	