General Information	
Academic subject	Inference and Sampling Techniques
Degree course	Bachelor
Curriculum	Marketing e Comunicazione d'Azienda
ECTS credits	8
Compulsory attendance	No
Language	Italian

Subject teacher	Name Surname	Mail address	SSD
	Silvestro Montrone	silvestro.montrone@uniba.it	SECS-S/01

ECTS credits details			
Basic teaching activities	8		

Class schedule	
Period	1st semester
Year	2nd
Type of class	Frontal lectures

Time management	
Hours	56
Hours of lectures	56
Tutorials and lab	

Academic calendar	
Class begins	September
Class ends	December

Syllabus	
Prerequisites/requirements	The student must have acquired the knowledge of Descriptive

	Statistics (Statistics I)
Expected learning outcomes	• ***Knowledge and understanding*** 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*** 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. • ***Making informed judgements 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.
Contents	

Course program	- Introduction to statistical inference - Random variables and their distributions - Logic and techniques of inference - Population, sample, parameters and estimators - Sample surveys: o The main sampling plans o Estimate of the total: major estimators o Estimate of the total in Simple Sampling o Estimate of the total in Systematic Sampling o Estimates of the total in Stratified Sampling o Estimate of the total in Cluster Sampling o Sample Size and Unit Allocation o Inference Problems on Mean o Inference Problems on Percentages - Comparison of Samples
Bibliography	G. GIRONE. Statistica, Bari, Cacucci. S. MONTRONE - M. CRISTALLO, Tecniche di Campionamento (Lezioni), Ed. Arte Print, Matera, 2007.
Notes	
Teaching methods	Frontal Lectures and Applications
Assessment methods	Exemptions: No Written Test: Si Oral Test: Si
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. 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
Further information	