

General Information	
Academic subject	Statistics
Degree course	Three-year degree course
Curriculum	Economics and Administration of Companies
ECTS credits	10
Compulsory attendance	No
Language	Italian

Subject teacher	Name Surname	Mail address	SSD
	Carlo Cusatelli	carlo.cusatelli@uniba.it	SECS-S/01

ECTS credits details			
Basic teaching activities	Lectures, internal cycles of in-depth study, exercises, seminars, laboratory activities, project work		

Class schedule	
Period	II semester
Year	I
Type of class	Lecture - workshops

Time management	
Hours	250
In-class study hours	80
Out-of-class study hours	170

Academic calendar	
Class begins	15 th February 2021
Class ends	28 th May 2021

Syllabus	
Prerequisites/requirements	Good knowledge of Basic Mathematics
Expected learning outcomes	<p><i>Knowledge and understanding on:</i></p> <ul style="list-style-type: none"> - Acquisition of descriptive and inferential statistics tools in order to study collective phenomena (especially in the business, economic and financial fields), for the specification of statistical models that can be used for forecasting and decision-making purposes. - Knowledge of official statistical sources for the retrieval of data for univariate and multivariate analysis. <p><i>Applying knowledge and understanding on:</i></p> <ul style="list-style-type: none"> - Plan a statistical survey, collect data, store it in databases, process it and present the results obtained. - Reading and evaluation of the metadata that accompany the statistical sources. - Perception of collective phenomena and their explanation through the statistical method. <p><i>Making informed judgements and choices</i></p> <ul style="list-style-type: none"> - Translate the cognitive needs of the collective dynamics in statistical terms. - Evaluate the results deriving from the calculation of statistical indicators and definition of the most suitable methods for achieving results.

	<ul style="list-style-type: none"> - Use the results of the analyzes to formulate interpretative hypotheses, obtain strategic indications, make decisions in conditions of uncertainty. - Evaluate the ethical and deontological aspects of the results of an investigation, in order to avoid inappropriate use of statistical information. <p><i>Communicating knowledge and understanding</i></p> <ul style="list-style-type: none"> - Synthesize, interpret and clearly present the results of the statistical analyzes carried out, both to experts in the application context and to specialists in the statistical field. - To grasp and define the statistical objective of a study with non-expert interlocutors, however, divulging the results with appropriate technical language. <p><i>Capacities to continue learning</i></p> <ul style="list-style-type: none"> - Acquisition of theory and technique of Statistics in its continuous methodological evolution. - Integration of one's own knowledge of the different realities to be examined, during the various phases of realization of the statistical survey.
Contents	<p>Part I: Descriptive statistics</p> <ul style="list-style-type: none"> • Detection and classification of data • Distributions and statistical tables • Graphical presentations • Statistical reports • Analytical and loose means • Variability: dispersion and inequality measures • Normal curve, asymmetry, non-normality • Analytical representation of distributions • Relations between characters: independence, dependence, interdependence • Temporal series: identification of the components • Territorial series <p>Part II: Probability and Inference</p> <ul style="list-style-type: none"> • Principles of probability and main random variables • Logic and technical of inference • Sample distribution • Estimates and confidence intervals • Hypotheses testing with one sample
Course program	
Bibliography	<p>G. Girone, C. Crocetta, A. Massari. Statistica. Ed. Cacucci. Bari, 2019</p> <p>F. Delvecchio. Statistica per lo studio dei fenomeni sociali. Ed. Cleup. Padova, 2015</p> <p>D. Viola, P. Iaquina. Esercizi di statistica. Ed. Cacucci. Bari, 2016</p>
Notes	Any other text with a similar index and same "Contents" is fine
Teaching methods	Use of traditional, electronic and computer blackboard
Assessment methods	Written and/or oral exam
Evaluation criteria	<i>Knowledge and understanding</i>

	<p>Detect data on statistical units: design and prepare the data collection questionnaire.</p> <p><i>Applying knowledge and understanding</i></p> <p>Organize and adequately assess qualitative and quantitative information on the data source.</p> <p><i>Autonomy of judgment</i></p> <p>Evaluate the aims of statistical research, organizing the phases of the preparative analysis according to time and space available.</p> <p><i>Communicating knowledge and understanding</i></p> <p>Use and decode statistical language.</p> <p><i>Capacities to continue learning</i></p> <p>Develop entrepreneurship and initiative.</p>
Further information	Autonomy in performing statistical tasks, being guided by data