**COURSE OF STUDY** *Business Economics (Bari)*

**ACADEMIC YEAR** *2023-2024*

**ACADEMIC SUBJECT** ***Statistics 1***

***Prof.ssa Antonella Massari***

| **General information** | |
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| Year of the course | *First year* |
| Academic calendar (starting and ending date) | *Second Semester 26 February-14June* |
| Credits (CFU/ETCS): | 10 CFU |
| SSD | *Secs-S/01* |
| Language | *Italian* |
| Mode of attendance | *Recommended* |

| **Professor/ Lecturer** | |
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| Name and Surname | Antonella Massari |
| E-mail | antonella.massari@uniba.it |
| Telephone | 080 5049312 |
| Department and address | *DEMDI University of Bari Aldo Moro* |
| Virtual room | *Microsoft Teams* |
| Office Hours (and modalities: e.g., by appointment, on line, etc.) | Tuesday 11:00–13:00 a.m. and Friday 11:00–13;00 a.m.<br>Team Code ou9kygq<br>For appointment contact the teacher by email |

| **Work schedule** | | | |
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| **Hours** | | | |
| Total | Lectures | Hands-on (laboratory, workshops, working groups, seminars, field trips) | Out-of-class study hours/ Self-study hours |
| *80* | *68* | *12* | |
| **CFU/ETCS** | | | |
| *10* | *8,5* | *1,5* | |

| **Learning Objectives** | The course aims to:<br>- provide the basic knowledge of statistical methodology for the descriptive analysis of social, economic, business and financial phenomena<br>- provide the skills needed to develop the critical ability necessary to apply the descriptive statistical methodology to |
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| | real cases, particularly forbusiness<br><br>- provide skills related to the collection, processing, presentation and interpretation of data in the univariate and bivariate analysis of collective phenomena and allow the efficient use of qualitative and quantitative information in the companies. |
| **Course prerequisites** | Basic Knowledge of Math |

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| **Teaching strategie** | Lectures, exercises, seminars ( Statistic analysis with Excel) |
| **Expected learning outcomes in terms of** | |
| **Knowledge and understanding on:** | Acquisition of the methodological tools of descriptive statistics for the univariate and bivariate analysis of collective phenomena, particularly for business |
| **Applying knowledge and understanding on:** | Knowing how to apply the methodology of descriptive data analysis to real cases choosing the most suitable measuring instruments |
| **Soft skills** | • *Making informed judgments and choices*<br>Autonomy of judgment: knowing how to adequately interpret the results obtained from the carried out descriptive analysis<br><br>• *Communicating knowledge and understanding*<br>Knowing how to present and explain the obtained results using the appropriate technical language<br><br>• *Capacities to continue learning*<br>Ability to learn the various stages of a statistical survey to transform the collected data into useful knowledge to make rational choices for business |
| ***Syllabus*** | |
| **Content knowledge** | Cap 1 Introduction to Statistics<br>Cap 2 Data collection and classification<br>Cap 3 Statisticaltables<br>Cap4Graphic representation<br>Cap 5 Statisticalratios<br>Cap 6 Averages<br>Cap 7 Variability: measurement of dispersion and inequality<br>Cap 8 Asymmetry: normal curve and skewness<br>Cap 9 Analytical representation of distributions<br>Cap 11 General concepts of the internal relations between the components of a double statistical variable |

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| | Cap 12 Analysis of Dependence<br>Cap 13 Analysis of Interdependence<br>Cap 15 Analysis of statistical mutable |
| **Texts and readings** | G. Girone, C. Crocetta , A. Massari "Statistica", Bari, Cacucci, 2019<br>D .Posa- S .De Iaco - M. Palma - S. Maggio, " Esercizi di Statistica descrittiva", G .Giappichelli, Torino, 2006<br>P .Perchinunno, V.C. De Nicolò "Esercizi di Statistica" Cleup 2010 |
| **Notes, additional materials** | The textbook for the study of methodology is Girone ,<br>The other texts are for practical applications and exercises |
| **Repository** | *Recommended texts, any supplementary teaching material will be distributed during the lessons and inserted in the teams class* |

| **Assessment** | |
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| Assessment methods | Oral exam which includes the application of the methodology to empirical cases and the related discussion of the results |
| Assessment criteria | *Knowledge and understanding*<br>The candidate must:<br>- show knowledge of the statistical methodology for the univariate and bivariate descriptive analysis of collective phenomena;<br>• *Applying knowledge and understanding*<br>knowing how to apply the acquired methodology to real cases, and choose the most appropriate measuring instruments and indexes<br>*Autonomy of judgment*<br>have autonomy of judgment in the interpretation of results relating to applications to collective phenomena |

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| | *Communicating knowledge and understanding*<br><br>knowing how to present in a clear way the results of the descriptive analysis carried<br><br>*Communication skill*<br><br>using an adequate technical language<br><br>• *Capacities to continue learning*<br>in particular, the student must be able to detect, process, present and interpret data (by means of synthesis, variability, form of distribution and analysis of the relationships between variables), in order to transform the information collected into useful knowledge to decision-making processes within a company. |
| Final exam and grading criteria | *The final mark is given out of thirty. The exam is considered passed when the grade is greater than or equal to 18. Some exercises will be given to the students who must solve and discuss them with the professor in relation to the methodological aspects; The final mark will come from the acquired level of knowledge either of the methodology or the applications carried out during the exam. Students will also have to demonstrate that they have developed independent judgment in the interpretation of the results and adequate capacity for argumentation and presentation* |
| **Further information** | |
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