UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Culture e società
ACADEMIC YEAR	2021/2022
BACHELOR'S DEGREE (BSC)	MASS MEDIA AND INSTITUTIONAL COMMUNICATION SCIENCES
SUBJECT	SOCIAL STATISTICS
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50087-Metodologie, analisi e tecniche della comunicazione
CODE	14400
SCIENTIFIC SECTOR(S)	SECS-S/05
HEAD PROFESSOR(S)	FERRANTE MAURO Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	6
INDIVIDUAL STUDY (Hrs)	110
COURSE ACTIVITY (Hrs)	40
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	1
TERM (SEMESTER)	1° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**FERRANTE MAURO** Wednesday 10:00 12:00 Stanza del docente: edificio 15, sesto piano, stanza 608, oppure su Piattaforma Microsoft Teams. E' preferibile che gli studenti interessati contattino il docente tramite mail qualche giorno prima per essere aggiunti al team del ricevimento.

DOCENTE: Prof. MAURO FERRANTE

PREREQUISITES	The students are expected to have basic knowledge of mathematical concepts of high school programs. Knowledge of linear equation is preferable.
LEARNING OUTCOMES	Knowledge and understanding. Understanding of reports and common practices which involve the use of basic statistical techniques in communication sciences. Applying knowledge and understanding. The student must be able to effectively use the statistical techniques learned during the course, and to develop potential application fields of these techniques in different contexts of interest. Applying knowledge and understanding. The student must be able to effectively use the statistical techniques learned during the course, and to develop potential application fields of these techniques in different contexts of interest. Making judgements. The peculiar attention placed on the different stages which characterize the statistical analysis process - from the construction of the data, to its collection and analysis - aims at developing a higher judgement capability of information and of derived results, which are delivered from the main institutions and media which operate in the communication areas. Communication. Students are expected to be able in interpreting and communicating effectively the results derived from the application of statistical techniques acquired during the course. This requires the knowledge of the essential elements of technical language of social statistics, the capability of interpretation of the results, and competences on writing research reports.
ASSESSMENT METHODS	Writtend and/or oral exam. Assessment Methods: Excellent - 30/30 cum laude - Excellent knowledge of course topics and of statistical language, the student is able in applying the acquired knowledge for solving the proposed problems. Very good - 26/29 - Good Knowledge of course topics, Very good knowledge of statistical languatge; the Student can apply the acquired knowledge for solving the proposed problems. Good - 24/25 - Basic knowledge of course topics, Dicreet knowledge of statistical language, with a certain capability in the application of acquired knowledge for solving the proposed problems. Acceptable - 21/23 - Minimum knowledge of main course topics. Acceptable knowledge of statistical language. Minimum capability in the application of acquired knowledge for solving the proposed problems. Sufficient - 18/20 - Minimum knowledge of main course topics. Acceptable knowledge of statistical language. Low or no capability in the application of acquired knowledge for solving the proposed problems. Inadequate - Student doesn't have the minimum knowledge of the main contents of the course topics.
EDUCATIONAL OBJECTIVES	Statistics is a key-element in many aspects of society. Mass media represent an important connection between those who produce statistical information and citizens as final users of these information. The course aims at developing critical capabilities of interpretation of messages and results which are communicated by mass media. Moreover, the peculiar emphasis placed on the knowledge of the main techniques for describing and analyzing social phenomena allows for the development of comprehension capabilities of the results as well as competences related with data analysis.
TEACHING METHODS	Lecture style-instructions, eventually made available through the Microsoft Teams platform. Examples and exercises will be provided during the class. E-learning portal of the University is constantly used for sharing teaching material, exersices, videos and forum. By considering the content of the subject, classes will have both a theoretical and applied approach.
SUGGESTED BIBLIOGRAPHY	Uno a scelta tra: Borra, S., & Di Ciaccio, A. (2014). Statistica: metodologie per le scienze economiche e sociali. McGraw-Hill. EAN: 9788838615160 (terza o seconda edizione vanno entrambe bene). Cicchitelli, G.; D'Urso, P.; Minozzo, M. (2017) Statistica. Principi e Metodi. Pearson. ISBN: 9788891902788

SYLLABUS

Hrs	Frontal teaching
2	Course introduction. The measurement process in social sciences. Main definitions and measurement scales.
2	Aims and main stages in statistical survey. Statistical sources.
2	Data Matrix. Simple statistical distributions. Frequency distributions: absolute, relative and percentage frequencies.
4	Graphical representations. Pie chart; Bar chart; Line Chart, Histogram
4	Measures of central tendency: Mode, Median, Quantiles, Arithmetic Mean. Main properties of arithmetic mean.
4	Variability: basic concepts. Heterogeneity: the Gini Index of Heterogeneity. Absolute and relative variability: Range, Interquartile range; Standard deviation; Coefficient of variation.
1	Symmetry and asymmetry. The box-plot.
1	Statistical ratios, and main statistical indexes.
2	Contingency tables. Row and column percentages and interpretation.
4	Association between variables: general concepts. Dependence and Independence. Measures of association in contingency tables, Spearman's rank-order correlation coefficient; Bravais-Pearson correlation coefficient; Linear regression model
2	Sampling: general concepts.
4	Probability and statistical inference: general concepts

Hrs	Practice
8	Examples and exercies.