



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Scienze Economiche, Aziendali e Statistiche		
<b>ACADEMIC YEAR</b>	2022/2023		
<b>MASTER'S DEGREE (MSC)</b>	BUSINESS ECONOMIC SCIENCES		
<b>INTEGRATED COURSE</b>	STATISTICS FOR BUSINESS CONTROL - INTEGRATED COURSE		
<b>CODE</b>	17110		
<b>MODULES</b>	Yes		
<b>NUMBER OF MODULES</b>	2		
<b>SCIENTIFIC SECTOR(S)</b>	SECS-S/03		
<b>HEAD PROFESSOR(S)</b>	VASSILIADIS ELLI	Ricercatore	Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	VASSILIADIS ELLI	Ricercatore	Univ. di PALERMO
<b>CREDITS</b>	10		
<b>PROPAEDEUTICAL SUBJECTS</b>			
<b>MUTUALIZATION</b>			
<b>YEAR</b>	2		
<b>TERM (SEMESTER)</b>	1° semester		
<b>ATTENDANCE</b>	Not mandatory		
<b>EVALUATION</b>	Out of 30		
<b>TEACHER OFFICE HOURS</b>	VASSILIADIS ELLI Tuesday 12:00 14:00 Stanza del docente		

**DOCENTE:** Prof.ssa ELLI VASSILIADIS

<b>PREREQUISITES</b>	Knowledge obtained in basic courses in Statistics and in business disciplines
<b>LEARNING OUTCOMES</b>	<p>Knowledge and understanding: to learn the technical language, to know the macro and micro statistical sources; to use appropriately the statistical methods to analyze economic scenarios, both macro and micro.</p> <p>Applying knowledge and understanding: To be able to recognize the statistical nature of data; to link correctly the micro and macro-variables among them; to build simple economic indicators; to analyze and interpret economic and business data.</p> <p>Making judgements: to be able to evaluate the consequences of a choice rather than another; to be able to integrate the different statistical sources; to be able to evaluate critically the results of simple analysis.</p> <p>Communication skills: ability to explain the results of the analyses to the peers and to a public not expert in the field.</p> <p>Learning skills: To be able to consult scientific papers; capability in upgrading sources, concepts and methods; to be able to contextualize an economic phenomenon.</p>
<b>ASSESSMENT METHODS</b>	<p>The final test is exclusively an oral test. The examination board will be interested to understand if the student has learnt the appropriate technical language to express correctly the fundamental concepts and subjects. The oral test involves also the solution of simple exercises or the proof of some formula.</p> <p>Evaluation Method: the score will be interpreted in the following way: a score of 30-30!: an excellent knowledge of the subjects and a great command of technical language; 26-29: good knowledge of discipline and some tolerable inaccuracy; 25-23: some knowledge of the main issues and heavy inaccuracy; 18-22: minimal knowledge of the arguments.</p>
<b>TEACHING METHODS</b>	Frontal lesson and practical exercises

**MODULE  
ECONOMIC AND BUSINESS STATISTICS**

*Prof.ssa ELLI VASSILIADIS*

**SUGGESTED BIBLIOGRAPHY**

Piacentino C. (2009), Elementi di Statistica economica e Contabilit  nazionale, Aracne Ed.  
Biggeri L., Bini M., Coli A., Grassini L. e Maltagliati M. (2012), Statistica per le decisioni aziendali, Pearson Italia, Milano.  
Andolina P. (2011), L'informazione statistica per la gestione aziendale, Aracne Ed., Roma.

<b>AMBIT</b>	21021-Attivit� formative affini o integrative
<b>INDIVIDUAL STUDY (Hrs)</b>	111
<b>COURSE ACTIVITY (Hrs)</b>	39

**EDUCATIONAL OBJECTIVES OF THE MODULE**

The course aims to teach those statistical methods necessary to analyze business problems, with implications with macro-economic phenomena. At the end of the course, each student will be able to get out of several statistical sources, to collect data, to sketch a simple economic analysis and synthesize it.

**SYLLABUS**

<b>Hrs</b>	<b>Frontal teaching</b>
2	Introduction to the subjects of the course
4	Economic operators and operations; Knight circuit; national and international economic statistical sources; the censuses and surveys.
4	Business statistical sources; internal and external sources; data quality
4	SNA 1995 and 2010; value added, GDP; national income; disposable national income; consumption and saving.
4	The temporal and spatial comparison of economic and business variables: price index numbers, industrial production index numbers; PPP.
4	Analysis of business technical performance: efficiency and productivity, production function, measuring partial and total productivity.
4	The relationship among the economic and business variables.
4	Business forecasts; measuring seasonality.
<b>Hrs</b>	<b>Practice</b>
9	Practical exercises on the different subjects of the course

**MODULE  
QUALITY CONTROL**

*Prof.ssa ELLI VASSILIADIS*

**SUGGESTED BIBLIOGRAPHY**

Montgomery D. C. (2006), Controllo statistico della qualità' (ed. it.) McGraw Hill.  
Tamburrano E. (1999), Il controllo statistico di qualità, Franco Angeli, Milano.

<b>AMBIT</b>	21021-Attività formative affini o integrative
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<b>INDIVIDUAL STUDY (Hrs)</b>	73
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<b>COURSE ACTIVITY (Hrs)</b>	27
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**EDUCATIONAL OBJECTIVES OF THE MODULE**

Study of the main models for the evaluation of the quality and interpretation of the results in a Total Quality Management (TQM) approach. Special emphasis will be given to the dissemination of the "culture of quality" as a strategic element for the competitive development of firms. For this purpose, both the difficulties that firms have in adopting the concept of quality as "systemic variable" that the opportunity to develop a customized approach to quality will be analyzed.

**SYLLABUS**

Hrs	Frontal teaching
2	Historical overview of the concept of quality: from the concept of quality to TQM. The components of quality.
2	The most important contributions to Quality. The PDCA cycle.
2	The seven tools of quality of Ishikawa.
2	The ISO 9000 standard.
2	The EFQM model
6	Control charts for attributes for variables and individual measures
2	Process capability

Hrs	Practice
6	Application of control charts
3	Evaluation of process capability