

Credits: 3

Code: SECS S/03 Matter: Economic Statistics Main language of instruction: Italian Other language of instruction: English

Teaching Staff

Head instructor Prof. Carlo Drago - carlo.drago@unicusano.it

Introduction

1. Objective of the course :

The course aims to provide students with the knowledge of measurement systems and statistical analysis of the main phenomena of our economic and financial system. The program is ideally divided into three parts ranging from the indication and rigorous explanation of the statistical tools used in the sector, to the presentation of economic theories that influence the behavior and decision-making models of economic operators. At the end of the study path, the student will be able to quantify the main economic and financial phenomena and compare the measurement methods most used internationally. The lessons will be based both on the theory of Economic Statistics and on computational techniques for the use of statistics in professional fields. In particular, students will deepen programming and softwarea languages applied to Economic Statistics such as R, Octavee GRETL. the course aims to train students also in relation to the most recent professional needs of the labor market.

Objectives

2. Course Structure: The course is organized in these parts:

- 1) Composite Indicators
- 2) Time Series Analysis and Forecasting in Economics



- 3) Labour Market Analysis
- 4) Poverty and Inequality measurement
- 5) Network Analysis in Economics and Finance

Etivities

To influence the rigor of learning the course contains a practical part consisting of the application of the concept learned over the course (etivities). The applied work will be discussed in class **which requires a previous work by the students**.

Competencies:

- Knowledge and understanding skills in Economic Statistics with applications.
- Ability to apply statistical knowledge and understanding to real cases and real problems
- Ability to draw conclusions
- Communication skills
- Ability to learn
 - 3. Programme of the course:

Subject 1. Composite Indicators

- Subject 2. Time Series Analysis and Forecasting in Economics
- Subject 3. Labour Market Analysis
- **Subject 4. Poverty and Inequality Measurement**

Subject 5. Network Analysis in Economics and Finance

Evaluation system and criteria

The assessments of course is based on the following criteria:

I) Final exam and an optional Etivites or exercise to be completed by the student



The points exam will be assigned on:

1) A theoretical part based on Economic Statistics on the examination (30 points at maximum)

2) The etivity adequately sent the day before the examination (3 points at maximum)

The maximum score is 30 cum Laude which is an higher score than 30.

Bibliography and resources

4. Materials to consult:

Lecture Notes and academic educational material of the course, books, other materials useful to learning agreed with the instructor.

5. Recommended bibliography:

1) OECD/European Union/EC-JRC (2008), Handbook on Constructing Composite Indicators: Methodology and User Guide, OECD Publishing, Paris, https://doi.org/10.1787/9789264043466-en.

pages 1-49

Download here: <u>https://www.oecd-ilibrary.org/economics/handbook-on-constructing-composite-</u> <u>indicators-methodology-and-user-guide</u> 9789264043466-en

2) Hyndman, R. J., & Athanasopoulos, G. (2018). Forecasting: principles and practice 3rd ed. O Text.

chapters 3.1-3.4 (time series decomposition), 9.1-9.8 (ARIMA models and forecasting)

Read here: <u>https://otexts.com/fpp3/</u>



3) Glaeser, E. L. (2005). Inequality. NBER Working paper

Download here: https://www.nber.org/system/files/working_papers/w11511/w11511.pdf

4) Santella, P., Drago, C., & Polo, A. (2009). The Italian chamber of lords sits on listed company boards: an empirical analysis of Italian listed company boards from 1998 to 2006. MPRA

pages 1-15

Download here: https://ideas.repec.org/p/pra/mprapa/2265.html