Professor name	Summo Domenico
Master in	Economics and Management
Academic year	2016-2017
I or II semester	Ι
Number of ECTS credits	8
Scientific Sector Code	SECS S/03

# Course unit title Economic Statistics (a.a. 2016/2017)

### (Prof. Summo Domenico)

# University of Bari Aldo Moro

Master in Economics and Management

### **Pre-requisites**

We require a basic knowledge of Descriptive and Inferential Statistics.

#### Objectives

The course is the statistical study of economic phenomena that take place between economic operators in general. Particular attention is given to the measurement of inflation and methods of quantitative analysis of growth processes. The course also aims at consumption analysis, inequality in income distribution and the degree of spread of poverty.

#### **Course content**

### **The Economic Aggregates**

Structure and functioning of an economic system. Economic operators. Operations and aggregates. The system of accounts. The evaluation of the aggregates . Constitution of resources. The gross domestic product. The national income. The distribution and redistribution of gross national income. The use of the available gross national income. International transactions and Balance of Payments .

#### **Input-output analysis**

The sectoral input-output model . The use of the input-output model in the analysis of the production structure . The cost prices model.

### Statistical Methods for the analysis of economic fluctuations

Prices and purchasing power of money: the measurement of inflation. The construction of index numbers of prices. Implicit price indices and remuneration rates of production factors. The comparison of the economic aggregates over time and space. The time series analysis: deterministic and stochastic models .

### The estimation of material capital and production capacity

Definitions and measurement of physical capital stock. Estimation of production capacity and its employment degree. The Wharton School method. The capital-output ratio method. The Bank of England method.

#### Production functions and productivity measurement

Interactions between production and capital. Physical capital and human capital. Some production functions. The Solow model approach to the measurement of technology growth. Productivity indices. Malmquist indices of total factor productivity.

## Measurements and models of labour market

The statistical sources. Concept and measurement of human capital: measurements of labour supply and demand. Interpretative models for the labor market

# Indicators of economic aggregates .

The growth multiplier. The debt-GDP ratio .

# Statistical analysis of consumption

Concepts and definitions. Evaluation methods. Empirical analyses and standard parameters. The consumption functions.

# Models and measures of income inequality

Concepts and definitions. Sampling techniques. Dispersion and asymmetry of the income distribution. Analytical description of the income distribution. Positive and regulatory measures of inequality. Definition and measurement of poverty.

# **Compulsory reading – study material**

R. Guarini F. Tassinari, *Statistica Economica: problemi e metodi di analisi* il Mulino, Bologna, 2000.

Slides from lectures.

## **Teaching methods**

- Direct contact: No
- Lectures: Yes
- Tutorials: Yes
- Personal work: No
- Case studies in group: No

## Assessment methods

- Assignment: No
- Written without oral presentation: Yes
- Oral presentation: Yes

This course is in e-learning Web Site area: No