

COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF INFORMATION SCIENCES & TECHNOLOGY		
ACADEMIC UNIT	DEPARTMENT OF STATISTICS		
LEVEL OF STUDIES	1st Cycle (UNDERGRADUATE)		
COURSE CODE	6114	SEMESTER	6 th
COURSE TITLE	Official Statistics		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
Lectures		4	7
Workshops			
Labs		2	
COURSE TYPE	Elective – Specific Background		
PREREQUISITE COURSES:	Basic knowledge of Statistics and Sampling will be useful.		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE WEBSITE (URL)	https://www.dept.aueb.gr/en/stat/content/official-statistics-7-ects		

(2) LEARNING OUTCOMES

Learning outcomes
Upon successful completion of the course, students will understand the role, basic principles and main data sources of Official Statistics, as well as basic methods for data integration and data analysis. They will be able to apply basic methods and indicators used in Official Statistics, such as index numbers, concentration indices and small area estimation methods. Particular emphasis will be placed on EU-SILC, covering the process from survey design and data collection to weighting, estimation and the production of key socio-economic indicators. Finally, they will become familiar with modern and experimental approaches and develop the ability to use Official Statistics in research applications.
General Competences
• Search, analysis and synthesis of data and information, using the necessary technologies • Adaptation to new situations • Decision-making • Teamwork • Working in an international environment • Working in an interdisciplinary environment • Generating new research ideas • Project planning and management • Respect for diversity and multiculturalism • Respect for the natural environment

- Demonstrating social, professional and ethical responsibility and sensitivity to gender issues
- Exercising criticism and self-criticism
- Promoting free, creative and inductive thinking

(3) SYLLABUS

Introduction to Official Statistics. Data sources for Official Statistics – Administrative data and data integration. European Union Statistics on Income and Living Conditions (EU-SILC) with applications in R. Index numbers and errors in index numbers. Concentration indices. Small area estimation with applications in R. Modern and experimental Official Statistics.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	YES	
TEACHING METHODS	Activity	Semester workload
	Lectures	52
	Studying and analyzing bibliography	12
	Tutorials	24
	Assignment	35
	Self-study	52
	Course Total	175
STUDENT PERFORMANCE EVALUATION	Written examination at the end of the semester	80
	Assignment	15
	Public presentation	5
	The instructor may additionally conduct a supplementary oral examination of a selected sample of students, based on an appropriate sampling procedure, the outcome of which shall be taken into consideration in determining the final grade. Information is available at eclass.	

(5) ATTACHED BIBLIOGRAPHY

- Τζωρτζόπουλος Π., Λειβαδά Α. (2011). *Αριθμοδείκτες και Επίσημες Στατιστικές*, Οικονομικό Πανεπιστήμιο Αθηνών, Αθήνα.
- 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>.
- Eurostat. (2025). *EU-SILC: Methodological Guidelines with Description of Variables*. [Link](#).
- Eurostat. (2019). *Guidelines on Small Area Estimation for City Statistics and Other Functional Geographies*. [Link](#).

- Eurostat. (2026). *Statistical requirements compendium*. [Link](#).