COURSE OUTLINE

(1) GENERAL

SCHOLL	Economics and Public Administration
ACADEMIC UNIT	Economic and Regional Development
LEVEL OF STUDIES	Undergraduate
COURSE CODE	800004 **SEMESTER** A'
COURSE TITLE	**STATISTICS I**

INDEPENDENT TEACHING ACTIVITIES *If credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole course, give the weekly teaching hours and the total credits.*	**WEEKLY TEACHING HOURS**	**CREDITS**
	4	6
Add rows if necessary. The teaching organisation and methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General backround, general knowledge, skills development
PREREQUISITE COURSES:	No
LANGUAGE OF INSTRUCTION and EXAMINATIONS :	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	https://openeclass.panteion.gr/courses/TMI260/

(2) LEARNING OUTCOMES

Learning outcomes
The course learning outcomes, specific knowledge, skills and competencies of an appropriate level, which the students will acquire with the successful completion of the course, are described. *Consult Appendix A* *• Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area* *• Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B* *• Guidelines for Writing Learning Outcomes*
After successfully completing the course, students are expected to: • Understand the basic concepts of probability theory and statistics. • Understand the basic statistical measures of central tendency and dispersion. • Know the characteristics of basic theoretical probability distributions. • Understand the methodology of collecting, processing and presenting statistical data. • Apply methods of inductive statistics (confidence intervals and statistical tests).

General Competences
Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information with the use of the necessary technology.	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Teamwork	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*

| Working in an interdisciplinary environment
Production of new research ideas | Others
……. |

- Search, analysis and synthesis of data and information, using the necessary technologies
- Work in an interdisciplinary environment
- Autonomous work
- Promotion of free, creative and inductive thinking

(3) SYLLABUS

The subject of the Statistics I course is related to:

(a) the design of the data collection process;

(b) their concise and effective presentation, and finally

(c) drawing corresponding conclusions.

The main modules of the course are the following:

- Define, collect and visualize data.
- Basic descriptive statistical measures: mean, standard deviation, median, quartiles, deciles.
- Basic probability theory (conditional probability, Bayes theorem)
- Discrete and continuous distributions.
- Confidence intervals, one and two sample hypothesis testing

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face Dinstance learning in case of emergency	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, and communication with students*	• Use of presentation and spreadsheet software • Email communication with students • Support of the learning process using the eclass electronic platform.	
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, projects, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given, as well as the hours of non-directed study according to the principles of the ECTS.*	*Activity*	*Semester Workload*
	Lectures	52
	Study and analysis of bibliography	98
	Course Total **(25 hours per ECTS)**	**150**

STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem-solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	• The evaluation of students is done through written exams in the Greek language (which in exceptional circumstances is carried out electronically). The written exams are held at the end of the semester during the examination period and represent 100% of the final grade.

(5)   ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Berenson L. Mark, Levine M. David, Szabat A. Kathryn (2018) Βασικές Αρχές Στατιστικής για Επιχειρήσεις-Έννοιες και Εφαρμογές

- Healey, J. (2006) The Essentials of Statistics: A Tool for Social Research. Wadsworth.