COURSE OUTLINE

(1) GENERAL

SCHOOL	School of Economics and Management Science
ACADEMIC UNIT	Department of Economics
LEVEL OF STUDIES	6
COURSE CODE	303 **SEMESTER** **2nd**
COURSE TITLE	Statistics II

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 of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
	4	7,5 ECTS
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		
COURSE TYPE *general background, special background, specialised general knowledge, skills development*	special background, skills development	
PREREQUISITE COURSES:	Statistics I	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek	
IS THE COURSE OFFERED TO ERASMUS STUDENTS	no	
COURSE WEBSITE (URL)		

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences 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*

By the end of the course the student will be able to:
• Estimate, contact testing hypothesis and find confidence intervals on the parameters of normal and other population distributions.
• Understand the main estimation principles: Least Squares and Maximum likelihood.
• Understand the sampling properties and sampling distributions of parameter estimates at various settings.

General Competences

Analysis and synthesis of Data.
Team work
Decision - Making

(3) SYLLABUS

1. Discrete and continuous random variables
2. Probability density functions and their properties
3. Estimation methods: least squares and maximum likelihood
4. Sampling properties (unbiasedness, consistency, efficiency)
5. Sampling distributions
4. Confidence intervals
5. Testing hypothesis
6. Introduction to linear regression models and their estimation

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	e-mail and office hours are used for the communication with the students

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, project, 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*3=156
	Computer laboratory practice (with Panousi)	8*3=24
	Project and exercises writing	8*1=10
	Course total	188

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.*	written final exam in Greek language

(5) ATTACHED BIBLIOGRAPHY

Κ. Ζαφειρόπουλος και Ν. Μυλωνάς (2018), Στατιστική με SPSS. Εκδόσεις Τζιόλα.