#### **COURSE OUTLINE**

# (1) GENERAL

SCHOOL	ECONOMIC AND SOCIAL SCIENCES			
ACADEMIC UNIT	DEPARTMENT OF ECONOMICS			
LEVEL OF STUDIES	FIRST YEAR			
COURSE CODE	ECON 203		SEMESTER	1
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 of the course, give the weekly teaching hours and the total credits			WEEKLY TEACHING HOURS	
			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	General ba	ackground		
PREREQUISITE COURSES:	NONE			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	HELLENIC, HELLENIC (ENGLISH, ENGLISH TO ERASMUS STUDENTS)			
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES			
COURSE WEBSITE (URL)	https://ecourse.uoi.gr/course/view.php?id=2792			

# (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

Knowledge of basic statistical ideas Understanding statistical analysis

Applications to real-world phenomena

#### **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 Project planning and management

information, with the use of the necessary technology Adapting to new situations Decision-making Working independently Team work Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and
sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking
.....
Others...

Decision-making
Working independently
Team work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas

## (3) SYLLABUS

Descriptive Statistics. Parameters of location, dispersion, and shape of a distribution. Probability. Discrete and continuous random variable, univariate and multivariate probability distribution, expected values. Some standard distributions: discrete and continuous Uniform distribution, Bernoulli, Binomial, Hypergeometric, Poisson, Exponential, Gamma, Beta, Normal, Lognormal,  $\chi^2$ , t, F, Bivariate Normal, and Polynomial. Sampling distributions and the Central-limit Theorem.

## (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> 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	YES		
TEACHING METHODS	Activity	Semester workload	
The manner and methods of teaching are described in detail.	LECTURES	48 HOURS	
Lectures, seminars, laboratory practice,	RECITATIONS	8 HOURS	
fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art	LABORATORY	8 HOURS	

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	Course total	64 HOURS
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,

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

(1) MIDTERM EXAMINATION (optional, 20%), (2) FINAL EXAMINATION (compulsory: 80% for students who do better in the mid-term test, and 100% for those who do not take the midterm test, or take it but do better in the final).

The midterm test consists of 20 multiple-choice questions, whereas the final exam consists of 30 multiple-choice questions, all in Greek.

## (5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- Related academic journals:
- 1. Statistics for Economists, D. Hatzinikolaou, Ioannina 2002, (Chs. 1-6, in Greek).
- problem Greek, uploaded 2. Three sets (in in https://ecourse.uoi.gr/course/view.php?id=2792)