

COURSE OUTLINE

(1) GENERAL

SCHOOL	FACULTY OF SOCIAL SCIENCES		
ACADEMIC UNIT	PSYCHOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	PSY-1202	SEMESTER	2 nd
COURSE TITLE	Statistics I		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures and laboratory exercises	3	8	
COURSE TYPE	General background (Compulsory)		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)	https://elearn.uoc.gr/course/view.php?id=1108		

(2) LEARNING OUTCOMES

Learning outcomes
<p><i>The aim of this course is to help student develop both theoretical and practical skills in the analysis and the interpretation of statistical data. The focus will be set on the student developing a “statistical mindset”. Statistics refers to our ability to draw logical conclusions from different sets of statistical data with the aid of statistical methods and techniques.</i></p> <p>By the end of this course the student will have:</p> <ul style="list-style-type: none"> • Understood the basic principles of statistics in the realm of social sciences. • Learned to use the Statistical Package for the Social Sciences (SPSS) at a basic level. • Learned to describe and organize the data he/she collects (descriptive statistics). • Understood how hypotheses are tested (inferential statistics).
General Competences
<ul style="list-style-type: none"> • Search for, analysis and synthesis of data and information, with the use of the necessary technology • Decision-making • Criticism and self-criticism • Production of free, creative and inductive thinking

(3) SYLLABUS

- Why Statistics are important
- Basic Measurement Principals
- Presenting Data
- Measures of Central Tendency & Variability
- Normal Distribution - Hypothesis Testing
- Correlation
- χ^2 statistic

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of ICT in teaching, support of the learning process through the 'e-learn' electronic platform		
TEACHING METHODS	Activity	Semester workload	ECTS credits
	Lectures	39 hours (13 lectures x 3 hours)	1,56
	Laboratory participation	26 hours (13 lectures x 2 hours)	1,04
	Laboratory exercise no. 1	20 hours (4 lectures x 5 hours)	0,8
	Laboratory exercise no. 2	20 hours (4 lectures x 5 hours)	0,8
	Evaluative exercise no. 1	20 hours (4 lectures x 5 hours)	0,8
	Evaluative exercise no. 2	20 hours (4 lectures x 5 hours)	0,8
	Preparation for final exams	52 hours (13 lectures x 4 hours)	2,08
	Final exams	3 hours	0,12
	Course Total	200	8
	STUDENT PERFORMANCE EVALUATION	I. Final exams (60%) II. Two evaluative tests (25% : 10%, 15%) III. Two laboratory evaluative exercises (15% : 10%, 5%)	

	Evaluation is performed in Greek. The evaluation criteria are constantly accessible to students via the website of the course.
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(5) ATTACHED BIBLIOGRAPHY

BASIC:

- Roussos, P. & Tsaousis, I. (2011). *Statistics in Behavioural Sciences with the use of SPSS*. Athens: Topos.
- Katsis, A., Sideridis, G., & Emvalotis, A. (2011). *Statistical Methods in Social Sciences*. Athens: Topos.

ADDITIONAL:

- Cohen, J. (1994). The earth is round ($p < .05$). *American Psychologist*, 49(12), 997-1003.
- Cohen, J. (1990). Things I have learned (So far). *American Psychologist*, 45(12), 1304-1312.
- Roussos, P. (2011). Null Hypothesis Significance Testing: procedure, misconceptions and some suggestions for good practices. *Psychology*, 18, 224-239 (in Greek).
- Lykken, D. T. (1968). Statistical significance in psychological research. *Psychological Bulletin*, 70(3), 151-159.