

SCHOOL OF EDUCATIONAL SCIENCES AND SOCIAL SCIENCES
DEPARTMENT OF PSYCHOLOGY AND SOCIAL WORK
(CIP file- Classification of instructional programmes)

Course unit title:	Statistics I		
Course unit code:	PDIS103		
Type of course unit:	Compulsory		
Level of course unit:			
Year of study:	2 ^o		
Semester when the unit is delivered:	3 ^o		
Number of ECTS credits allocated :	5		
Name of lecturer(s):	Rita Panaoura		
Learning outcomes of the course unit:	<p>With the completion of the module, students should be able to:</p> <ol style="list-style-type: none"> 1. Estimate and interpret the indices of the descriptive statistics (mean, median, mode, range, standard deviation etc) 2. Analyse and explain the outputs at excel and SPSS (crosstabs, descriptive indices, mean comparison, regression analysis, factor analysis, correlation). 3. Construct by themselves the appropriate graph or table in order to present the results. Use of APA style for the presentation. 4. Use appropriately and conduct by using the SPSS statistical package the main types of analyses: t-test, anova, regression, correlation, factor analysis, χ^2 etc. 5. Explain the presuppositions for each type of analysis. 6. Explain the concepts of normal distribution, statistical error in sampling process. 7. Construct and present the methodology in the case of a quantitative research plan and justify the respective statistical techniques. 		
Mode of delivery:	Lecture Group discussion Discussion with a critical perspective on papers with statistical analyses Application of the processes for analyses by using SPSS at the laboratory Calculation through exercises of many statistical indices.		
Prerequisites:			

Course contents:	<ol style="list-style-type: none"> 1. The domain of Statistics and the value of quantitative research. . 2. Variables and scales. 3. Graphs and figures. Criteria and presuppositions. 4. The concepts: mean , median, mode, range, frequency, percentage, standard deviation. Calculate and interpret them. 5. Random sample, standard error, normal distribution. 6. Compare means (t-test, anova) 7. Calculate and interpret the correlation 8. Exploratory factor analysis 9. Regression analysis
Recommended and/or required reading:	<p>In Greek</p> <ul style="list-style-type: none"> • Δαφέρμος, Β. (2005). <i>Κοινωνική στατιστική με το SPSS</i>. Θεσσαλονίκη: Ζήτη. • Μακράκη, Β. (2005). <i>Ανάλυση Δεδομένων στην Επιστημονική Έρευνα με τη Χρήση του SPSS</i>. Αθήνα: Gutenberg. • Παπαναστασίου, Κ. & Παπαναστασίου, Ε. (2005). <i>Μεθοδολογία εκπαιδευτικής έρευνας</i>. Λευκωσία: Έκδοση συγγραφέα.
Textbooks:	
References:	<p>In Greek</p> <ul style="list-style-type: none"> • Γναρδέλης, Χ. (2003). <i>Εφαρμοσμένη στατιστική</i>. Αθήνα: Παπαζήσης. • Δαμιανού Χ. & Κούτρα Μ. (2000). <i>Εισαγωγή στη Στατιστική</i>. Αθήνα: Συμμετρία. • Παπαδημητρίου, Γ. (2001). <i>Περιγραφική στατιστική</i>. Θεσσαλονίκη: Παρατηρητής. <p>In English</p> <ul style="list-style-type: none"> • Clarke, G. & Cooke, D. (1983). <i>A basic course in statistics</i>. London: Edward Arnold. • Heiman, G. (1992). <i>Basic statistics for the behavioral sciences</i>. Boston: Houghton Mifflin. • Hinkle, D., Wiersma, W., & Jurs, S. (1988). <i>Applied statistics for the behavioral sciences</i>. Boston: Houghton Mifflin.

	<ul style="list-style-type: none"> • Singh, K. (2007). <i>Quantitative social research methods</i>. London: Sage Publications. • Silverman, S. J., Locke, L. F., & Spirduso, W. W. (2007). <i>Proposals that work: A guide for planning dissertations and grant proposals</i>. London: Sage Publications.
Planned learning activities and teaching methods:	Lectures discussions, presentations. Group work Individual works by using SPSS at the laboratory. Use of the e-learning platform.
Assessment methods and criteria:	1. Course work <ul style="list-style-type: none"> - Exercises 20% - Individual or group work 10 % - Midterm 20 % 2. Final exams 50%
Language of instruction:	Greek
Work placement(s):	