COURSE OUTLINE

(1) General

School:	Social Sciences		
Academic Unit:	Geography		
Level of studies	Undergraduate		
Course Code:	GEO 104	**Semester:**	A
Course Title:	Quantitative methods in Geography		
Independent Teaching Activities	**Weekly Teaching Hours**	**Credits**	
Lecture	3		
Laboratory practice	2		
		Course total	5
Course Type:	Required		
Prerequisite Courses:	None		
Language of Instruction and Examinations	Greek		
Is the course offered to Erasmus students:	No		
Course Website (Url):	https://geography.aegean.gr/pps/index_en.php?content=0&lesson=104		

(2) Learning Outcomes

Learning Outcomes

At the end of the semester students will have learned the basic techniques of data mining and analysis. They would be expected to have the ability to tabulate primary data, create frequency distributions, cross-tabulate two variables and discover any causal relationship between them. They will also know to infer whether the results of a sample can be extrapolated to the population through various tests of significance (t-tests for one and two samples, chi-square tests and goodness-of-fit tests). Finally students will have the capacity to understand academic articles that present results of quantitative surveys with strict statistical language.

General Competences

1. Search for, analysis and synthesis of data and information, with the use of the necessary technology
2. Decision-making
3. Working independently
4. Working in an interdisciplinary environment
5. Criticism and self-criticism
6. Production of free, creative and inductive thinking

(3) Syllabus

- Basic statistical techniques for social scientists. Usage of the statistical software SPSS. Very useful to the wider field of social and political sciences (public administration, geography, sociology etc). Course content:

- Descriptive statistics, Probability theory, Probability distributions, Estimating procedures, Hypothesis testing.

(4) Teaching and Learning Methods - Evaluation

Delivery:	Face to face teaching.	
Use of Information and Communication Technology:		
Teaching Methods:	**Activity**	**Semester workload**
Lecture	52	
Laboratory practice	24	
Non-supervised study	60	
Performance evaluation/Exams	4	
	Course total<	140

Student Performance Evaluation

(5) Attached Bibliography

1. Ζαχαροπούλου Χ. (2012) Στατιστική, μέθοδοι εφαρμογές, τόμος Α'. Θεσσαλονίκη: Εκδόσεις «σοφία».Δημητριάδης Ε. (2012) Στατιστική Επιχειρήσεων με εφαρμογές σε SPSS και LISREL. Αθήνα: Εκδόσεις Κριτική.
2. Healey, J. (2006) The Essentials of Statistics: A Tool for Social Research. Wadsworth.
3. Δημητριάδης, Ε. (2002) Περιγραφική Στατιστική. Καβάλα: Εκδόσεις Κριτική.
4. Δημητριάδης Ε. (2007) Στατιστικές Εφαρμογές με SPSS. Αθήνα: Εκδόσεις Κριτική.