

## COURSE DISCRIPTION

### 1. GENERAL

<b>SCHOOL</b>	ENVIRONMENT, GEOGRAPHY AND APPLIED ECONOMICS		
<b>DEPARTMENT</b>	GEOGRAPHY		
<b>LEVEL OF COURSE</b>	Undergraduate		
<b>COURSE CODE</b>	FE0201	<b>SEMESTER</b>	7
<b>COURSE TITLE</b>	STATISTICAL AND NUMERICAL METHODS		
<b>STRUCTURE OF TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>NUMBER OF CREDITS ALLOCATED (ECTS)</b>
Lectures and Laboratory Classes		3	5
<b>TYPE OF COURSE</b>	Optional		
<b>PREREQUISITES</b>	-		
<b>LANGUAGE OF INSTRUCTION</b>	GREEK		
<b>COURSE OFFERED TO ERASMUS STUDENTS</b>	YES (in English if required)		
<b>(URL)</b>			

### 2. EXPECTED LEARNING OUTCOMES

<p><b>Learning outcomes</b>  <i>Describe the objectives of the course as well as the expected learning outcomes</i></p>
<p>This module offers an in depth analysis of specific statistical topics useful in exploring geographic data. Students are encouraged to combine acquired knowledge so as to proceed with a solid statistical analysis. based on the use of SPSS, R or SAS and . The practical sessions provide “hands on” applications while the laboratory sessions of the course are essential for the learner in order to demonstrate its skills on statistical packages.</p>

### 3. COURSE CONTENTS

<p>Descriptive and Inferential Statistics –Exploratory analysis          Spatial statistics - Indexes          Cluster Analysis –Factor Analysis          ANOVA          Regression Analysis          Principles of Numerical Methods</p>
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### 4. TEACHING AND ASSESSMENT METHODS

<b>TYPE OF LECTURES</b>	Laboratory Lectures and Practice	
<b>ICT USE</b>	ICT use and e-class	
<b>TEACHING STRUCTURE</b>	<b>Activity</b>	<b>Hours per semester</b>
	Lectures	13
	Laboratory	26
	Assignments	30
	Studying	55
	<b>TOTAL</b>	<b>124</b>
<b>ASSESSMENT METHODS</b>	<p>Assessment Language: Greek</p> <p>The basic assessment type of the course is the written assignment (project) providing the 70% of the final grade. It is combined with an oral exam contributing to the rest 30% of the final grade.</p>	

## 5. RECOMMENDED READING

<ul style="list-style-type: none"> <li>• Συμεωνάκη Μ. (2015) "Στατιστική για όλους με το SPSS" Εκδόσεις Σοφία.</li> <li>• Bamberg G., F. Baur, M. Krapp (2014) "Στατιστική" Επιστημ. Επιμέλεια Θ. Καλαντζής, Εκδόσεις Προπομπός.</li> <li>• Field, A. (2016) "Η διερεύνηση της στατιστικής με τη χρήση του SPSS της IBM", Εκδόσεις Προπομπός.</li> <li>• Ebdon D. (1986), "Statistics in Geography", Blackwell Publishing</li> <li>• Fortheringham AS and others (2001), "Quantitative Geography", SAGE Publications.</li> <li>• Mac Grew JC and CB Monroe (2000), "An Introduction to Statistical problem Solving in Geography", 2d edition.</li> <li>• Rogerson P. (2001), "Statistical Methods for Geography", SAGE Publications.</li> </ul>
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