### **COURSE OUTLINE**

#### 1. GENERAL

1. GENERAL				
SCHOOL:	SOCIAL SCIENCES			
DEPARTMENT:	PSYCHOLOGY			
LEVEL:	Undergraduate			
COURSE CODE:	PSY-2201 <b>SEMESTER</b> 3 <sup>nd</sup>			
COURSE TITLE:	Statistics II			
COURSE ISNTRUCTOR:	Zampetakis Leonidas Assistant Professor in Industrial – Organizational Psychology			
TEACHING ACTIVITIES			WEEKLY HOURS	ECTS
Lectures and laboratory exercises		3	6	
COURSE TYPE:	General background (Compulsory)			
PREREQUISITE	Statistics I (PSY1202)			
COURSES:	Research Methods I (PSY1201)			
LANGUAGE OF	Greek			
INSTRUCTION and				
<b>EXAMINATIONS:</b>				
IS THE COURSE	Yes (independent study of English literature, 1 assignment,			
OFFERED TO	and term paper)			
ERASMUS STUDENTS?	1 // 1	,		2126
COURSE WEBSITE	https://elearn	.uoc.gr/c	ourse/view.php?id	=2436
(URL):				

### 2. LEARNING OUTCOMES

## **Learning Objectives**

This course is designed to enhance the student's basic knowledge and understanding of the statistical method as it pertains to hypothesis testing. During the course, students become familiar with many of the concepts needed to understand, conduct, and interpret common statistical procedures and techniques. The emphasis of this course is on the acquisition of conceptual, rather than procedural, knowledge that can be demonstrated by selecting, applying and interpreting appropriate statistical procedures.

At the end of the course, the students should be able to:

- expose the student to advanced statistical techniques,
- develop the skills necessary to identify an appropriate technique, estimate models, and interpret results for independent research make the student proficient in the use of the commonest statistical techniques used in social sciences,
- give the student exposure to different analytic strategies and philosophies and to critically evaluate contemporary social research using advanced quantitative method.
- give the student the expertise to "think" about appropriate statistical techniques for the problems they will face in-and-out of the academic settings, and become familiar with

the basic SPSS commands, and know how to interpret its outputs

#### **General Competences**

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Decision making
- Working independently
- Production of free, creative and inductive thinking.

### **SYLLABUS**

**DELIVERY** 

- Lecture 1: Revision: Hypothesis Testing
- Lecture 2: Non-parametric tests
- Lecture 3: Mean Differences t-test (one- and two-samples)
- Lecture 4: Introduction to Analysis of Variance
- Lecture 5: One-way Analysis of Variance (One-way ANOVA)
- Lecture 6: Midterm Exam I
- Lecture 7: Factorial ANOVA (Part I)
- Lecture 8: Factorial ANOVA (Part II)
- Lecture 9: Regression (Simple and Multiple)
- Lecture 10: Exploratory Factor Analysis (EFA)
- Lecture 11: Midterm Exam II
- Lecture 12: Confirmatory Factor Analysis (CFA)
- Lecture 13: Introduction to Path Analysis and SEM

Face to face

# 3. TEACHING and LEARNING METHODS - EVALUATION

USE OF INFORMATION AND	Use of Information and Communication Technologies (ICT) in					
COMMUNICATIONS	teaching					
TECHNOLOGY						
	Use of e-class for the support of teaching and the achievement of					
	learning outcomes, and for communicating with students.					
TEACHING						
ORGANIZATION		Activity	Semester	ECTS		
		, and the second	workload	Credits		
		Lectures	39 hours	1.56		
		Lectures	39 HOUIS	1,56		
			20.1	0.00		
		Evaluative exercise no. 1	20 hours	0,80		
		Evaluative exercise no. 2	20 hour)	0,80		
		Individual assignment	10 hours	0,40		
		Independent study	60 hours	2,40		
		Final exams	3 hours	0,12		
		Total	152 hours	6,08		
			1			

STUDENT PERFORMANCE EVALUATION	I. Final exams (60%) II. Two evaluative tests (30%: 15%, 15%) III. Individual assignment (10%)
	Language of evaluation: Greek. For Erasmus exchange students' language of evaluation will be English.

# 4. Bibliography

- Roussos, P. & Tsaousis, I. (2011). Statistics in Behavioral Sciences with the use of SPSS. Athens: Topos.
- Katsis, A., Sideridis, G., & Emvalotis, A. (2011). Statistical Methods in Social Sciences. Athens: Topos.Robbins, S.P., & Judge, T.A. (2017). Organizational Behavior-17<sup>th</sup> Edition: Pearson, N.Y.