

COURSE OUTLINE

1. GENERAL INFORMATION

FACULTY	ECONOMY AND MANAGEMENT		
DEPARTMENT	ORGANIZATIONS MANAGEMENT, MARKETING AND TOURISM		
LEVEL OF STUDY	UNDERGRADUATE		
COURSE CODE	1605-230808	SEMESTER	8th (dir. Tourism)
TITLE	Special Methods of Data Analysis		
Autonomous Teaching Activities		WEEKLY TEACHING HOURS	CREDITS
Lectures		3	5
Laboratory			
TOTAL			
COURSE TYPE	SPECIAL BACKGROUND		
PREREQUISITE COURSES	NONE		
TEACHING LANGUAGE	GREEK AND ENGLISH		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBPAGE (URL)	https://exams-sod.the.ihu.gr/		

2. LEARNING OUTCOMES

Learning outcomes
<p>1. KNOWLEDGE: Students will understand the concepts of multidimensional statistical data analysis, with an emphasis on research data, and will be able to describe and identify it.</p> <p>2. UNDERSTANDING: They will also be able to distinguish specific methods of multidimensional non-parametric analysis in research data in order to study phenomena and to evaluate and explain findings such as trends, correlations, and categorizations.</p> <p>3. APPLICATION: the student will be able to examine and apply the skills of special methods of multidimensional statistical analysis in research data in order to study multivariate problems and extract findings such as factors, trends, correlations, and segmentations.</p> <p>4. ANALYSIS: The student will be able to develop and encode on PC primary research data, analyze the data using special multidimensional data analysis software, and differentiate complex phenomena.</p> <p>5. SYNTHESIS: the student composes and organizes data analysis methods of the family of multidimensional factor analysis, which have as main characteristics that they work exploratory following the data without relying on predetermined models and their philosophy is holistic, i.e., they look for the complex relationships that govern the overall phenomenon under study.</p> <p>6. EVALUATION: the student evaluates highly effective methods in management and marketing to study trends, discover behavioral profiles and find the most important factors that define a phenomenon. The application of the methods is carried out using the</p>

specialized data analysis software M.A.D.
General Skills
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the necessary technologies • Adaptation to new situations • Decision making • Autonomous work • Teamwork • Work in an international environment • Work in an interdisciplinary environment • Production of new research ideas

3. COURSE CONTENT

<p>The course teaches:</p> <ol style="list-style-type: none"> 1. the handling of multidimensional data and the meaning of information 2. the concept of factor analysis 3. the concept of classification in multidimensional data 4. the design of questionnaires for the collection of data suitable for multidimensional methods 5. the coding of the data, their organization in appropriate tables 6. data processing, interpretation using descriptive statistics 7. creating and interpreting a Burt table 8. the method of Factor Correlation Analysis 9. the method of Ascending Hierarchical Classification 10. a series of laboratory exercises using the MAD program 11. to 13 Case studies

4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Theory lectures face to face or through modern distance learning. Laboratory exercises in a computer room. Elaboration of work through asynchronous distance learning.	
ICT USE	Electronic presentations (e.g., PowerPoint). Use of special MAD statistical analysis software. Distance learning platform in the sharing of educational material and asynchronous learning	
TEACHING ORGANIZATION	<i>Activities</i>	<i>Working Load per Semester</i>
	Lectures	26
	Laboratory	13
	Assignment	41
	Study	70
	TOTAL	150

ASSESSMENT	Written examination (60%) Work (40%) The test material is posted on Moodle and time is spent before the test on answering questions about the test material. A file of students' examination documents is kept until they receive their degree. After the exam, time is available to each student to clarify his / her mistakes and explain his / her grade.
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5. REFERENCES

-Suggested bibliography:

- MULTI-DIMENSIVE STATISTICAL ANALYSIS, Karapistolis N. Dimitrios., Altintzi Publications, 2011, Eudoxus Code [12866215]
- Data analysis, Papadimitriou Giannis, Typothito Publications, 2007, Code. Eudoxus [31439].
- Methods of Data Processing and Analysis, Karapistolis N. Dimitrios, Altintzi Publications, 2011.