

COURSE OUTLINE

1. GENERAL

SCHOOL	BUSINESS AND ECONOMICS		
DEPARTMENT	BUSINESS ADMINISTRATION		
DIVISION	BUSINESS ADMINISTRATION		
LEVEL OF STUDY	UNDERGRADUATE		
COURSE UNIT CODE	1103304	SEMESTER OF STUDY	3
COURSE TITLE	BUSINESS STATISTICS II		
COURSEWORK BREAKDOWN		TEACHING WEEKLY HOURS	ECTS Credits
Lectures Laboratory and case studies		5	6
COURSE UNIT TYPE	Special Background		
PREREQUISITES :			
LANGUAGE OF INSTRUCTION/EXAMS:	GREEK		
COURSE DELIVERED TO ERASMUS STUDENTS	YES		
MODULE WEB PAGE (URL)	http://moodle.teipir.gr/course/info.php?id=83		

2. LEARNING OUTCOMES

Learning Outcomes

The aim of the course is to introduce students to the basic concepts of statistical inference and to familiarize students with the usage of statistical packages .

After the successful completion of this course the students will be able to:

- Understand the basic concepts of Estimation (with applications primarily in the confidence intervals)
- Apply statistical tests of mean values and rates for one and two samples and interpret the results
- Apply the statistical test chi square and interpret the results
- Develop basic concepts of quality control charts
- Evaluate different statistical methods on data analysis problems
- For the above must be familiar with appropriate software via the laboratory part of the course

General Skills

- Search, analysis and synthesis of data and information with the use of new technologies
- Teamwork
- Decision-making
- Planning and management of projects

3. COURSE CONTENTS

<p>Estimability-Confidence Intervals Statistical tests of mean values Statistical tests of percentages Chi square test Forecasting Quality control in order to check on industrial production before it reaches the consumer. #</p>

4. TEACHING METHODS - ASSESSMENT

MODE OF DELIVERY	In-Class	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	Support of the learning process through the e-class platform.#	
TEACHING METHODS	<i>Method description</i>	<i>Semester Workload</i>
	Lectures	52
	Class Work/Workshop	13
	Lab Exercises	35
	Independent and Directed Learning	50
	Total	150
ASSESSMENT METHODS	<p>I. Final Examination (50%) (Summative Evaluation) includes: - Multiple choice questions or true/false questions - Short answer questions <u>Evaluation Objective:</u> To understand the fundamentals of the course. <u>Evaluation Criteria:</u> Comprehensiveness, accuracy, and critical evaluation.</p> <p>II. Multiple Choice Tests (10%) (Formative Evaluation) Concerns issues covered by lectures. <u>Evaluation Objective:</u> Examination of students' progress in relation to learning outcomes, feedback and fine tuning of the course lectures. <u>Evaluation Criteria:</u> Comprehensiveness, accuracy, and critical evaluation.</p> <p>III. Individual project (Laboratory) (40%)(Summative Evaluation): Concerns issues covered by laboratory lessons. <u>Evaluation Objective:</u> Examination of students' progress in relation to learning outcomes, feedback and fine tuning of the laboratory lessons. <u>Evaluation Criteria:</u> Comprehensiveness, accuracy, and critical evaluation.</p> <p>Evaluation criteria are explicitly referred on the site of the course for each learning activity.</p>	

5. RESOURCES

Books

Bickel P.J., Doksum K. A., Mathematical Statistics, Volume 1, Basic Ideas and Selected Topics, 2nd ed. Prentice Hall, 2001

Casella G., Berger R. L., (2001) Statistical Inference, 2nd ed., Duxbury Press,.

Hogg R. V., Craig A T., McKean J W., (2004) An Introduction to Mathematical Statistics, 6th ed., Prentice Hall.

Landow, S. and Everitt, B. (2004) A Handbook of Statistical Analyses Using SPSS, Chapman and Hall/CRC Press Company, New York, Washington.

Montgomery D C., Peck E A., Vining G. G, (2001) Introduction to Linear Regression Analysis, 3rd ed., Wiley-Interscience.

Mood A. M., Graybill F. A., Boes D. C. (2002) Introduction to the Theory of Statistics. McGraw-Hill Series in Probability and Statistics. McGraw-Hill.

JOURNALS

Annals of Statistics

Statistics and Probability Letters

Journal of statistical planning and inference

Journal of statistics and probabilities

Journal of business statistics and economics

Journal of business and economic statistics