



Course Syllabus

Course Code	Course Title	ECTS Credits
MATH-321DL	Statistics II	6
Prerequisites	Department	Semester
MATH-221DL	Computer Science	Fall/Spring
Type of Course	Field	Language of Instruction
Required	Mathematics	English
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Mr Christoforos Christoforou	2 nd or 3 rd
Mode of Delivery	Work Placement	Corequisites
Distance Learning	N/A	None

Course Objectives:

The main objectives of the course are to:

- Provide students with knowledge of the theory of hypothesis testing on population means.
- Cover in detail all aspects of Analysis of Variance.
- Cover in detail all aspects of the Chi Square Test.
- Cover in detail all aspects of Correlation, Regression and Time Series Analysis.
- Make students aware of the basic non parametric tests.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Execute hypothesis testing for the Population Mean.
2. Execute hypothesis testing for the difference between two Population Means (paired samples and independent samples).
3. Make students aware of Linear Correlation and to perform Multiple Regression.
4. Execute Tests of Independence and Homogeneity.
5. Execute One-Way ANOVA tests.
6. Make students aware of the basic Non Parametric tests.
7. Be able to use the SPSS package efficiently.

Course Content:

1. Hypothesis Testing for the value of the Population Mean
2. Hypothesis Testing for the difference of two Population Means
3. Linear Correlation and Regression
4. Chi-Square Tests of Independence and Homogeneity
5. One-Way ANOVA
6. Non Parametric Statistics

Learning Activities and Teaching Methods:

Lectures, Handouts and Assignments.

Assessment Methods:

Assignments, Mid-Term Exam, Final Examination

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Understandable Statistics: Concepts and Methods, 12 th Ed.	Brace and Brace	Wiley	2018	1337119911

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Statistics for Management & Economics, 10 th Ed.	Keller and Warrack	Thompson	2014	1285425456