



Course Syllabus

Course Code	Course Title	ECTS Credits
MATH-321	Statistics II	6
Prerequisites	Department	Semester
MATH-221	Computer Science	FALL/SPRING
Type of Course	Field	Language of Instruction
Required	Mathematics	English/Greek
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Dr. Stavros Pouloukas	3 rd
Mode of Delivery	Work Placement	Corequisites
Face-to-face	N/A	None

Course Objectives:

The main objectives of the course are to:

1. Provide students with knowledge of the theory of hypothesis testing on population means.
2. Cover in detail all aspects of Analysis of Variance.
3. Cover in detail all aspects of the Chi Square Test.
4. Cover in detail all aspects of Correlation, Regression and Time Series Analysis.
5. 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, Assignments and In-class Exercises

Assessment Methods:

Final Examination, Midterm Examinations, Assignments and Participation.

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Understandable Statistics	Brase and Brase	Wiley	2018	978-1337119917

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Statistics for Management & Economics	Keller Gerald	Thompson	2018	978-1337093453