General Information			
Course name:	**Statistics**	**ECTS Credits**	**6**
		Semester	Summer

Aims

The aim of this course is to give to students the basic knowledge required for the statistical analysis of description, analysis and interpretation of survey results. The emphasis is also placed on the ability to read and understand the results of statistical analyzes.

Contents

1. Introduction to statistics. Measurement scales in the behavioral sciences.
2. Descriptive statistics. Organizing data - tables and graphs (steam-and-leaf, histogram, frequency polygon, bar graphs and pie chart).
3. Measures of central tendency (mode, median and mean). Percentiles and box-and-whisker plots. Measures of variation and characteristics of the shape of the distribution.
4. Elementary probability theory. The normal curve and standard scores.
5. Correlation coefficients. Simple linear regression.
6. The Central Limit Theorem. Sampling distribution. Interval estimates - confidence intervals for the population mean and population proportion.
7. Inferential statistics – introduction to hypothesis testing, type I error and type II error.
8. Parametrical tests – Student`s t-tests, ANOVA.
9. Chi-square and other nonparametric tests (The Mann-Whitney U test, sign test, Wilcoxon signed ranks test).

Evaluation

1 x mid term exam (30 %), 1 x homework (10 %) and final exam (60 %)

SK Košice 02

• Excellent – 10 – 9,1 A
• Very good – 9,0 – 8,1 B
• Good – 8,0 – 7,1 C
• Satisfactory – 7,0 – 6,1 D
• Sufficient – 6,0 – 5,1 E
• Unsatisfactory / Unsufficient/Failed – 5,0 FX

Bibliography
Textbook: **1.** BRASE, C. H., BRASE, C. P. (2009). *Understandable statistics: Concepts and Methods.* 9th Ed. Boston, New York: Houghton Mifflin Company. **Optional Additional Texts:** **1.** PAGANO, R. R. (2009). *Understanding Statistics in the Behavioral Sciences.* 9th Ed. Wadsworth. **2.** KELLEY, M., DONNELLY, A. (2009). *The Humongous Book of Statistics Problems*. Alpha, Pengui Group Inc.