

Title of the course:	STATISTICS I.		
Course ID:	VE-MIT001		
Level of education:	Compulsory for BA	Academic semester:	Fall
Status	Basic, single, compulsory for economic studies		
Professor's name:	Dr. József Cser	Academic title:	Associate Professor
Hours per semester:	Lecture 15, practice 30	Credits:	4
Pre-requisite:	Business Mathematics	Co-requisite:	Business Information Systems
Exam:	Written exam	Recommended: none	Restrictions: none

Aims of the course

The module introduces students to Descriptive Statistics (tabular and graphical approaches, measures of location and dispersion). Theoretical foundations are laid down in sampling Point and Interval Estimation as well as Hypothesis Testing. This module assumes basic knowledge about Mathematics, which can be obtained from the module Business Mathematics. It feeds directly into the module Statistics II. and provides methodology to other modules.

Course outline

1. Data, measurement, tabular and graphical approaches
2. Summarizing quantitative and qualitative data
3. Measures of central tendency
4. Measure of dispersion. Type of distributions
5. Continuous and discrete distributions in statistics
6. Index numbers
7. Index numbers exercise
8. Sampling and Sampling Distributions
9. Point estimation and interval estimation
10. Estimation of proportion and standard deviation
11. Determining the sample size
12. Statistical computations in Excel
13. Statistical computations in Excel
14. Summary

Learning outcomes

Knowledge and understanding

The students have to

- a) Understand the basic objects and techniques of data collection and analysis
- b) Understand the main goal and approach of statistical inference
- c) Understand the role of statistics in the business

Disciplinary/Professional Skills

The students

- a) have to be familiar with the condition of the usage and technique of listed concepts
- b) are able to plan and carry out statistical inference from data collection to interpretation on simple but real business or economic situations
- c) should be able to prepare and use data of simple models in statistical estimations
- d) show adequate skills in presentation and interpretation of the result of statistical analysis

Teaching and learning experience

The students receive introductory lectures followed by seminars. The seminars provide active exercise on technique and opportunity to make the lecture topics clear, business originated examples are provided and analyzed. Students have to study the topics of the lectures having able actively participate in the work of the seminars.

Weekly class contact

- 1 hour lecture
- 2 hours seminar

Requirements and assessment

Course work		50%
Class contribution	25%	
Home assignment	35%	
Progress test		40%

Participation at the seminars is compulsory. Those who miss more than 30% of the seminars automatically fail the semester.

Examination **50%**

90 minutes written test containing theoretical questions and business originated examples.
Both examination and course work are successfully passed with minimum of 50% result. For passing grades, <50% corresponds to a mark 1 (no passing), 65% a 2, 75% a 3, 85% a 4, and >85% a mark 5.

Indicative reading list

Glyn Davis & Branko Pecar (2013): Business Statistics Using Excel. Oxford University Press
Anderson, Sweeney, Williams (1996): Statistics for Business and Economics. West Publishing Co.
Lapin (1993): Statistics for Modern Business Decisions. The Dryden Press.
Mann (1995): Statistics for Business and Economics. John Wiley&Sons. Inc.
Becker (1995): Statistics for Business and Economics. South-Western College Publishing.