UNIVERSITY OF MISKOLC

Faculty of economics

Institute of Economic Theory and Methodology

Syllabus STATISTICS (GTÜSE1012AB)

Courses in English in full-time BA program 2nd semester, 2023/2024 academic year

Course title: STATISTICS	Neptun code of course: GTÜSE1012AB
	Course type: Compulsory
Course coordinator: Beatrix Varga, Ph.D., Associate professor	
Teaching staff involved: Roland Szilágyi, Ph.D., Associate professor	
Recommended semester: 2 nd	Preconditions:
	Mathematics for Economic Analysis I.
No. of lessons/week: 2 + 2	Acknowledgement of course completion:
	exam
Credit value: 5	Type of course: Lecture and practice
Aim and content of course	

Aim and content of course:

The aim is to introduce the base of quantitative methods to examine the main processes and relations of business and economic life.

Thematic description of course content:

Lectures:

Week/date Content

16th February The origin of statistics, the Hungarian Central Statistical Office. Basic

definitions.

23th February Ratio statistics.
1st March Graphic presentation.

8th March Frequencies 15th March Holiday 22nd March Holiday 29th March Holiday

5th April Measures of central tendency (means, mode, median)

12th April Measures of dispersion (range, IQR, variance, standard dev., coeff. of var.)

Percentiles, quartiles, box plot.

19th **April** Measures of shape, symmetry, asymmetry

26th April Index numbers (price index, value index, quantity index)

3rd May Index numbers (territorial indexes)

10th May Decomposition, Part 1. 17th May Decomposition, Part 2.

Seminars:

Week/date Content

1st Introduction. Statistical rows.

2nd Ratio statistics I.3rd Ratio statistics II.

4th Graphic presentation in Excel

5th Frequencies

6th Measures of central tendency (means, mode, median)

7th	Measures of dispersion. (range, IQR, variance, standard dev., coeff. of var.)
	Percentiles, quartiles.
8th	Measures of dispersion. (range, IQR, variance, standard dev., coeff. of var.)
	Percentiles, quartiles.
9th	Asymmetry. Box plot.
10th	Index numbers I. (price, value, quantity index)
11th	Index numbers (territorial indexes)
12nd	Decomposition – difference decomposition
13rd	Decomposition – ratio decomposition
14th	Complex task solution

Requirements:

Method and evaluation of in-semester assessment:

Participation in at least 70% of the seminars.

Exam requirements:

signature

Completion requirements and evaluation criteria for seminar grades and exams:

Written exam:

0-50: fail 51-60: pass

61-70: satisfactory 71-80: good 81-90: excellent

Other information:

Lecture: A1/128, Friday XXXIII. lecture hall **Seminar:** A1/128, Monday 14-16 am

Consultation:

it can be find at the webpage of the Institute of Economic Theory and Methodology http://gtk.uni-miskolc.hu/gei/faculty

Compulsory literatures:

- 1. Lecture slides
- 2. Newbold, Paul: Statistics for business and economics; Upper Saddle River: Pearson Education, cop. 2007
- 3. Healey, Joseph F.: Statistics: A tool for social research; Belmont: Wadswoth Publ., 1984

Recommended literatures:

1. Rickmers, Albert D.: Statistics, an introduction; New York, McGraw-Hill, 1967