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|  | **Óbuda University Keleti Faculty of Business and Management** | | | | | | | | |
| **Unit of Study:** | Statistics I | | | | | **Subject code:** | | GVXST1ABNE | |
| **Institute:** | Department of Enterprise Management (1084 Budapest, Tavaszmező str. 15-17.) | | | | | **Credits:** | | 3 | |
| **Course type:** | Full-time | | | **Language:** | | English | | **Term:** | Fall |
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| **Major:** | Technical management BSc. | | | | | | | | |
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| **Lecturer-in-charge:** | Viktor Nagy, Ph.D. | | | **Lecturer(s):** | | Viktor Nagy, Ph.D. | | | |
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| **Prerequisites:** |  | | | | | | | | |
| **No. of sessions  per week/term:** | Weekly | **Lecture:** | 1 | **Seminar:** | 2 | **Lab:** | 0 | **Consultation:** | 0 |
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| **Exam/Course assignment:** | Midterm exam | | | | | | | | |
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| **Course objectives:** | Upon completion of this course, students should understand the main concepts of statistics, use the basic jargon and be able to handle the tools and formulas of descriptive statistics. | | | | | | | | |
| **Course assessment:** | Students are required to attend all classes. Should a student accumulate 5 absences (excused and/or unexcused) out of 14 in the semester class, he/she will not receive academic credits. Students are required to pass two tests. Students may get homework, which should be handed in until the next lesson or presented in some minutes in the lectures. | | | | | | | | |
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| **Week (consultation)** | **Course content** | | | | | | | | |
| **1.** | The field of Statistics. Descriptive and inferential Statistics. Data, information. Sources: primary and secondary. Qualitative and quantitative data. Direct observation, experiments, surveys. | | | | | | | | |
| **2.** | Population, subpopulation, sample. Parameter, statistic. Measurement scales. Basic jargon. Discrete and continuous variables. | | | | | | | | |
| **3.** | Comparison, ratios, harmonic, geometric, arithmetic, quadratic means. | | | | | | | | |
| **4.** | Frequency distributions, classes, Lorenz curve, concentration. | | | | | | | | |
| **5.** | Measures of central tendency, percentiles. Measures of dispersion, measures of relative position. | | | | | | | | |
| **6.** | Graphing categorical and numerical data, charts. | | | | | | | | |
| **7.** | Test 1 | | | | | | | | |
| **8.** | Contingency tables I. Measures of association. | | | | | | | | |
| **9.** | Contingency tables II. Mixed relationship. | | | | | | | | |
| **10.** | Contingency tables III. Correlation. | | | | | | | | |
| **11.** | Comparison with the method of standardization. | | | | | | | | |
| **12.** | Index numbers: simple indices, weighted aggregate indices: Laspeyres’ and Paasche’s indices, Fisher indices. | | | | | | | | |
| **13.** | Test 2 | | | | | | | | |
| **14.** | Makeup exams | | | | | | | | |
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| **Assessment (method of assessment,  make-ups and re-sits):** | Grade in this course is calculated numerically based on total points/percentages of the two tests although the instructor may raise or decrease it by one grade based on the active/inactive participation in classes or the level of the homework.  5 (excellent): 87 – 100 %  4 (good): 75 – 86 %  3 (satisfactory): 63 – 74 %  2 (pass): 51 – 62 %  1 (fail): 50 or less %  Should a student accumulate a total of 50 or less percentages, an additional chance is given to him/her to meet the requirements. | | | | | | | | |
| **Course completion (written or oral exam, test, etc.):** | Written. | | | | | | | | |
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| **Compulsory literature:** | Louise Swift and Sally Piff: Quantitative Methods for Business, Management and Finance, Macmillan Education UK, 2014  Les Oakshott: Essential Quantitative Methods: For Business, Management and Finance. 6th Edition, Palgrave, 2016  Les Oakshott: Quantitative Methods. Palgrave, 2014  Robert Donnelly: The Complete Idiot`s Guide to Statistics. 2nd Edition, Alpha, 2007  Deborah J. Rumsey: Statistics For Dummies. 2nd Edition, Wiley, 2011 | | | | | | | | |
| **Recommended literature:** | David Freedman, Robert Pisani, Roger Purves: Statistics (4th Edition), W.W.Norton & Company Inc, 2007 | | | | | | | | |
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| **Additional material:** |  | | | | | | | | |
| **Quality management aspects:** | TÜV CERT EN ISO 9001:2000 | | | | | | | | |