



Subject card

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|---|---|--|-------------------------------------|------------|--|---------|-----|
| Subject name and code | ESSENTIALS OF STATISTICS, PG_00058545 | | | | | | |
| Field of study | Economic Analytics | | | | | | |
| Date of commencement of studies | October 2024 | Academic year of realisation of subject | | | 2024/2025 | | |
| Education level | first-cycle studies | Subject group | | | Obligatory subject group in the field of study Subject group related to scientific research in the field of study | | |
| Mode of study | Part-time studies | Mode of delivery | | | at the university | | |
| Year of study | 1 | Language of instruction | | | Polish | | |
| Semester of study | 1 | ECTS credits | | | 5.0 | | |
| Learning profile | general academic profile | Assessment form | | | assessment | | |
| Conducting unit | Faculty of Management and Economics | | | | | | |
| Name and surname of lecturer (lecturers) | Subject supervisor | dr inż. Krzysztof Świetlik | | | | | |
| | Teachers | | | | | | |
| Lesson types and methods of instruction | Lesson type | Lecture | Tutorial | Laboratory | Project | Seminar | SUM |
| | Number of study hours | 16.0 | 0.0 | 16.0 | 0.0 | 0.0 | 32 |
| | E-learning hours included: 0.0 | | | | | | |
| Learning activity and number of study hours | Learning activity | Participation in didactic classes included in study plan | Participation in consultation hours | | Self-study | | SUM |
| | Number of study hours | 32 | 10.0 | | 83.0 | | 125 |
| Subject objectives | Selects an appropriate methodology for testing regularities occurring in mass processes, using statistical software to process data and interpret obtained results. | | | | | | |
| Learning outcomes | Course outcome | Subject outcome | | | Method of verification | | |
| | [K6_U07] uses information technologies to improve data analysis and decision-making processes | uses statistical software that facilitates the analysis of mass data and supports decision-making processes | | | [SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment | | |
| | [K6_W02] demonstrates comprehensive preparation in the field of methods, techniques for formulating and solving problems | formulates the problem appropriately, obtains the data, selects methods necessary for solving the given problem, and interprets the results correctly. | | | [SW3] Assessment of knowledge contained in written work and projects | | |
| Subject contents | Stages of statistical investigation. Sampling methods. Statistical variables and measuring scales. Random variables and their theoretical distributions. Non-parametric description of the distribution of the. Classical and positional measures of central tendency. Classical and positional measures of differentiation. Classical and positional measures of asymmetry and kurtosis. Correlation analysis. Introduction to regression analysis. Analysis of the association between categorical variables. Dynamic analysis index method. Dynamic analysis trend method Grouping and presentation of statistical material. The most common mistakes in statistical research. | | | | | | |
| Prerequisites and co-requisites | | | | | | | |
| Assessment methods and criteria | Subject passing criteria | Passing threshold | | | Percentage of the final grade | | |
| | Written exam | 60.0% | | | 50.0% | | |
| | Tutorial exam | 60.0% | | | 50.0% | | |

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| Recommended reading | Basic literature | Barrow, M. (2012), Statistics for Economics, Accounting and Business Studies, Harlow: Prentice Hall. Newbold, P., Carlson, W.L., Thorne, B. (2019). Statistics for Business and Economics, New York: Pearson Education. |
| | Supplementary literature | Agresti, F. (2012). Statistics. The Art and Science of learning from data, Boston: Pearson Education. Aczel, A. (2008). Complete Business Statistics, New Jersey: Wohl Publishing. |
| | eResources addresses | Adresy na platformie eNauczanie: |
| Example issues/ example questions/ tasks being completed | <p>Explain the difference between random and convenient selection. Describe briefly the measurement theory. Make a complex structure analysis of the households income in the Pomeranian Voivodeship in 2019. Check if there is a correlation between gender and consumer behaviour. On the basis of the data from the "Exam" file, calculate and interpret the dynamic measures of emigration in Poland. Was the pace of change higher in 1990-2000 or 2000-2010? Justify your answer. Based on the data from the "Exam" file, estimate the regression function for TFR using unemployment as a regressor. Write down the estimated model in the form of an equation. Interpret the structural parameters of the model and the goodness-of-fit measures. Does the estimated model fit well with the real data? Justify your answer.</p> | |
| Work placement | Not applicable | |