**Table 5.2** Specification of subjects

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Study program:** Advanced Data Analytics in Business | | | | | |
| **Name of the subject: Methods of Statistical Analysis** | | | | | |
| **Teacher(s):** Vinko Lepojević, Vesna Janković-Milić | | | | | |
| **Status of the subject:** Elective | | | | | |
| **Number of ECTS credits: 7** | | | | | |
| **Conditions:** | | | | | |
| **Subject goal**  Practical and theoretical training of students to understand modern models and methods in statistical analysis and their training to apply adopted methods to data from different areas of economics. This course offers students to upgrade their knowledge and learn how to apply them in solving practical problems by analysis and critical interpretation data, by building statistical models and using the latest software packages for statistical analysis. | | | | | |
| **Outcome of the subject**  Students will be able to:   * calculate and correctly interpret statistical indicators; * apply modern statistical methods; * comment on the optained results; * use appropriate software packages (SPSS, STATISTICS). | | | | | |
| **Subject content**  *Theory*  Data types and measurement scales, Data visualization, Descriptive measures, Sampling, sample types and sampling distributions, Statistical inference, Parametric tests, Non-parametric tests, Time series components.  *Practical learning*  Solving simple tasks and examples from practice with active work on the computer. | | | | | |
| **Literature**   1. Sharma, J.K. (2012) *Business Statistics – second edition*, Pearson Education. 2. Freund, R., J., Wilson, W., J., Mohr, D., L. (2021) *Statistical Methods – fourth edition*, Elsevier. USA. 3. Holmes. A., T., Illowsky, B., Dean, S. (2017) *Introductory Business Statistics*, Openstax. | | | | | |
| **Number of active teaching classes** | | **Theoretical teaching:** 30 | | **Practical teaching:** 45 | |
| **Method of carrying out the teaching**  Presentation, dialogue, graphics, individual work. | | | | | |
| **Evaluation of knowledge (maximum number of points 100)** | | | | | |
| **Pre-exam obligations** | points | | **Final exam** | | points |
| Activity during lectures | 10 | | Written exam | | 0 |
| Practical teaching | 10 | | Oral exam | | 0 |
| Colloquium | 20 | | Project presentation | | 50 |
| Seminar(s) | 10 | | **Total** | | **100** |