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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | **Faculty of Philosophy** | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Pedagogy | | |
| Study Module (if applicable) | | | | / | | |
| Course title | | | | **Statistics in pedagogical research** | | |
| Level of study | | | | Bachelor  Master’s  Doctoral | | |
| Type of course | | | | Obligatory  Elective | | |
| Semester | | | | Autumn Spring | | |
| Year of study | | | | 2 | | |
| Number of ECTS allocated | | | | 5 | | |
| Name of lecturer/lecturers | | | | Jelena Ž. Maksimović | | |
| Teaching mode | | | | Lectures Group tutorials  Individual tutorials  Laboratory work  Project work  Seminar  Distance learning  Blended learning  Other\*  \* The course consists of lectures and exercises, interactive teaching, data collection, data entry and data processing. The lectures cover basic units of the teaching/learning material, with additional explanations and referring to individual work. During practical teaching lessons, students work individually, examine each of the processed statistical techniques, collect, enter and process the data and interpret the results by means of adequate methods. | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| **The aim of the course**  The aim of the course is acquiring basic theoretical knowledge and skills necessary for the statistical analysis of data in pedagogy; acquiring knowledge about the methods of collecting, editing, presenting, analysis and interpretation of empirical data; presenting the logic of statistical inference and basic statistical techniques, and their execution in the statistical package SPSS.  **Course Outcomes**  After completing the course, students should: reproduce basic knowledge of statistical concepts, know basic commands in the statistical package SPSS, perform the data entry and independently determine basic descriptive measures, understand the basic logic of statistical inference and statistical hypothesis testing, coordinate conclusions from the existing data, independently perform and interpret descriptive and inferential statistical procedures. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **Contents**  *Theory study*  The subject matter of pedagogical statistics; specifics of the statistics use in education; the role of statistics in education and upbringing research; Statistical methods in pedagogical research; 2. Basic concepts (mass phenomena, statistical meetings, statistical series and statistical data, statistical tables); Basic population and samples; Variables; 3. The software package for statistical analysis; Preparing data for data input; Arranging, organization and data entry; 4. Measurement in pedagogical research; Measurement scales; 5. Ranges; 6. Mean values; 7. Variability measures; 8. Normal distribution; 9. Correlation measures; 10. Graphic presentation of results; 11. Correlations; 12. Hypothesis testing; 13. Parametric statistical tests; 14. Non-parametric statistical tests; 15. Construction of measuring instruments.  *Practical teaching*  Introduction to statistical package SPSS, defining variables, data entry, interpretation of results, determining descriptive statistics in the software, | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| Serbian (complete course)  English (complete course)  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)  Serbian with English mentoring Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
| **ASSESSMENT METHODS AND CRITERIA** | | | | | | |
| **Pre exam duties** | **Points** | | **Final exam** | | | **points** |
| **Activity during lectures** | **5** | | **Written examination** | | | **60** |
| **Practical teaching** | **5** | | **Oral examination** | | | **/** |
| **Teaching colloquia** | **20** | | **Seminar paper** | | | **10** |
|  |  | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |