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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Science and Mathematics | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Physics** | | |
| Study Module (if applicable) | | | |  | | |
| Course title | | | | Methodology of Pedagogical Research in Physics Teaching | | |
| Level of study | | | | ☐Bachelor ☐ Master’s ☒ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒ Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | 1 | | |
| Number of ECTS allocated | | | | 15 | | |
| Name of lecturer/lecturers | | | | Ljubiša D. Nešić | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work ☒ Project work ☒ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Training for pedagogical research in physics education* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **Specifics of research of pedagogical phenomena in physics education. Types and research of pedagogical issues. The choice of research problems (scientific and pedagogical relevance). Defining goals and tasks of research. The research hypothesis. The choice of research methods (types and designs of research). The sample to be used for research (selection and validity). Survey instruments (the construction, validity, methods of data collection, processing). Statistical Methods in pedagogical research (type, reliability, fault). Interpretation of the data. Drawing conclusions based on the data from the study. Ways of presenting research results (writing a report about the research and communication of key findings). New trends in pedagogical research in physics teaching.** | | | | | | |
| **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** | **20** | | **Written examination** | | |  |
| **Practical teaching** |  | | **Oral examination** | | | **60** |
| **Teaching colloquia** | **20** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |