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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Pedagogical faculty in Vranje | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Primary School Teaching | | |
| Study Module (if applicable) | | | | / | | |
| Course title | | | | **Practicum of Teaching Mathematics** | | |
| Level of study | | | | ☒Bachelor ☐ Master’s ☐ Doctoral | | |
| Type of course | | | | ☒ Obligatory ☐ Elective | | |
| Semester | | | | ☒ Autumn ☒Spring | | |
| Year of study | | | | IV | | |
| Number of ECTS allocated | | | | 5 | | |
| Name of lecturer/lecturers | | | | Prof. dr Nela Malinović-Jovanović, associate professor | | |
| Teaching mode | | | | ☒Lectures ☒Group tutorials ☒ Individual tutorials  ☐Laboratory work ☐ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☒ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| ***Acquiring knowledge necessary for understanding:*** *innovative teaching methods and models for performing initial mathematics teaching as well as contemporary traditional oriented teaching; components of methodical analysis of math class; components, criteria and standards for evaluation; problem solving and strategies for his solution.*  ***By the and of the course students are expected to have following knowledge, skills and understanding:*** *apply innovative teaching methods in the classroom; comprehend problem solving tasks and their significance for the initial mathematics teaching, as well as strategies for their solution; are competent for professional, didactically-methodical and technical preparation for teaching mathematics; concretization of didactically-methodical requirements through the writing lesson plan in initial mathematics teaching and practical implementation of mathematics in the classrooms as well as didactically-methodical, pedagogically-psychological and methodical analysis of math class, know how to formulate mathematical issues in accordance with one of the contemporary taxonomy of aims and objectives of teaching.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| 1. **Innovative teaching methods (Individualized teaching, individual teacher instructions, teaching on three levels of complexity, programmed teaching, problem solving, contemporary traditional subject-centered teaching, exemplary teaching,)** 2. **Differentiated homework** 3. **Methodical analysis of math class** 4. **Components, criteria and standards for evaluation students knowledge** 5. **The curriculum of mathematics for primary school and educational standards for the end of the first cycle of compulsory education** 6. **Contemporary taxonomies of aims and objectives of teaching mathematics** 7. **The concept and importance of problem solving in teaching mathematics** 8. **Direct strategies for problem solving** 9. **Geometrical approach for problem solving (method of line-segment, method of rectangles)** 10. **Logical-arithmetical approach for problem solving (the inversion method, method of false assumptions, method of logic)** | | | | | | |
| **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** |
| **Students practical teaching math in the classroom** | **50** | | **Written examination** | | | **20\*** |
| **Methodical analysis of math class** | **10** | | **Oral examination** | | | **10** |
| **Problem solving tasks** | **10** | |  | | |  |
| **Teaching colloquia** | **20\*** | | **OVERALL SUM** | | | **100** |
| **\*Passing the teaching colloquia released students of the written examination** | | | | | | |