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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Occupational Safety in Niš | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Environmental Protection | | |
| Study Module (if applicable) | | | | - | | |
| Course title | | | | Mathematics 1 | | |
| Level of study | | | | ☒Bachelor ☐ Master’s ☐ Doctoral | | |
| Type of course | | | | ☒ Obligatory ☐ Elective | | |
| Semester | | | | ☒ Autumn ☐Spring | | |
| Year of study | | | | 1. | | |
| Number of ECTS allocated | | | | 7 | | |
| Name of lecturer/lecturers | | | | Miomir Stanković, Mirjana Vidanović | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☒ Individual tutorials  ☐Laboratory work ☐ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Acquiring mathematical knowledge necessary to take specialised courses in the later years of study.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **Elements of mathematical logic and set theory. Determinants, matrices, systems of linear equations. Vector algebra. Elements of analytical geometry (plane and line in space). Introduction to analysis of real functions. Limiting values of numerical sequences and real functions of one variable. Differential and integral calculus. Real functions of several variables (partial derivatives, extreme values). Introduction to program package Mathematica.** | | | | | | |
| **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** | | | **40** |
| **Practical teaching** | **5** | | **Oral examination** | | | **-** |
| **Teaching colloquia** | **25+25** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |