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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | [**Faculty of Sciences and Mathematics**](http://wpresspmf.pmf.ni.ac.rs/?lang=en) |
| **GENERAL INFORMATION** |
| Study program  | **Geography** |
| Study Module (if applicable) | **Geography** |
| Course title | **Business Mathematics** |
| Level of study | ☐Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory ☐ Elective |
| Semester  |  ☐ Autumn ☐Spring |
| Year of study  | **The first year** |
| Number of ECTS allocated | **6** |
| Name of lecturer/lecturers | **Marija Krstić** |
| Teaching mode |  ☐Lectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| **The course aimsMastering basic elements of business mathematics.outcomeTo enable students to apply their knowledge in practice** |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **ContentsTheoretical bet onIntroductory concepts (mathematical logic. Conferences. Relationships. Elementary functions.); Elements of linear algebra (vectors. Some applications of the vector in the economy. Matrices. Determinants. Systems of linear equations. The macroeconomic models based on systems of linear equations. Linear programming with application in economics.); Elements of analysis (limit value functions. Continuity function. Copies of the tool.) Economic function (function of demand. The supply function. The function of the total cost, average cost and marginal cost. The function of the total revenue and marginal revenue. Function profit. Optimization of economic functions. The elasticity of economic functions.); Basic concepts of financial mathematics (Percentage account.); Interest expense (interest free account. Compound interest account, anticipatory and continuous rate of interest.); Periodic payments (Financial annuity, anticipatory and interim payments.); Depreciation of the loan (loan with equal installments. The loan with equal payments.)Practical teachingSolving problems that occur in practice.** |
| **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** | **25** |
| **Practical teaching** | **5** | **Oral examination** | **25** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |