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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 | | | | Statistics | | |
| Level of study | | | | ☐Bachelor ☐ Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☐ Elective | | |
| Semester | | | | ☐ Autumn ☐Spring | | |
| Year of study | | | | The second year | | |
| Number of ECTS allocated | | | | 6 | | |
| Name of lecturer/lecturers | | | | Miroslav Ristić | | |
| 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 aims Mastering knowledge of statistics outcome Data analysis method of statistics | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Contents Basic elements of probability theory: Event. Operations between events. Probability and basic characteristics. Conditional probability and independence. Random variables. Multidimensional random variables. Importantly distribution of random variables: Distributions of discrete random variables. Distribution absolutely continuous random variables Numerical characteristics of random variables: Numerical characteristics that indicate the center grouping. Mere deviation of the random variable from the center grouping. Other numerical characteristics of distributions. The correlation coefficient Basic statistical terms: Population, memorial, pattern. Strategy sampling. Selection of points from the floor in the sample. Tabular and graphical representation of data The statistical study of: Spot assessment parameters distribution characteristics. Interval estimation of parameters distribution characteristics Testing statistical hypotheses: Hypothesis tests on the parameters. Pearson χ2 test Regression: Linear regression. Nonlinear models depending  Practical teaching Direct work with students, defining and solving related problems in relation to theoretical instruction | | | | | | |
| **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** | | | **55** |
| **Practical teaching** | **15** | | **Oral examination** | | | **45** |
| **Teaching colloquia** | **40** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |