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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 aimsMastering knowledge of statisticsoutcomeData analysis method of statistics |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| ContentsBasic 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 variablesNumerical 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 coefficientBasic statistical terms: Population, memorial, pattern. Strategy sampling. Selection of points from the floor in the sample. Tabular and graphical representation of dataThe statistical study of: Spot assessment parameters distribution characteristics. Interval estimation of parameters distribution characteristicsTesting statistical hypotheses: Hypothesis tests on the parameters. Pearson χ2 testRegression: Linear regression. Nonlinear models dependingPractical teachingDirect 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** |