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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | **Faculty of Sciences and Mathematics** |
| **GENERAL INFORMATION** |
| Study program  | **Mathematics** |
| Study Module (if applicable) |  |
| Course title | Mathematical Statistics |
| Level of study | $$Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | $$ Obligatory ☐ Elective |
| Semester  |  $$ Autumn ☐Spring |
| Year of study  | Third |
| Number of ECTS allocated | 7.5 |
| Name of lecturer/lecturers | Biljana Č. Popović |
| Teaching mode |  $$Lectures ☐Group tutorials ☐ Individual tutorials $$Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning $$ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Introduction of statistical inference. Analysing of data using statistics. Effectual interpretation of the subject of statistics in elementary and secondary school mathematics. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Introduction of sampling theory. Graphical and tabular presentation of data. Empirical distribution function. Monte Carlo study. Point and interval estimation of parameters. Confidence regions. Order statistics. Parametric and nonparametric tests. Introduction to decision theory. |
| **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** |  | **Written examination** | **30** |
| **Practical teaching** | **16** | **Oral examination** | **30** |
| **Teaching colloquia** | **24** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |