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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Sciences and Mathematics |
| **GENERAL INFORMATION** |
| Study program  | **Physics** |
| Study Module (if applicable) |  |
| Course title | Basics of Electrodynamics |
| Level of study | ☒ Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  |  ☐ Autumn ☒Spring |
| Year of study  | 3 |
| Number of ECTS allocated | 7 |
| Name of lecturer/lecturers | Ljiljana T. Stevanović |
| Teaching mode |  ☒Lectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *The aim of this course is to develop an understanding of the basic principles of electrodynamics. After completing this course, students should be able to apply acquired knowledge in solving Maxwell equations for some simple problems.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Maxwell’s equations for EM field in vacuum. Maxwell-Lorentz equations. Static EM fields. Poisson and Laplace equations. Quasi-static EM fields. EM waves. Dispersion.**  |
| **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** | **10** | **Oral examination** | **30** |
| **Teaching colloquia** | **15** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |