|  |
| --- |
|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Sciences and Mathematics |
| **GENERAL INFORMATION** |
| Study program  | **Physics** |
| Study Module (if applicable) | General physics; Applied and Experimental Physics |
| Course title | Fundamentals of Plasma Physics |
| Level of study | ☐Bachelor x Master’s ☐ Doctoral |
| Type of course | x Obligatory ☐ Elective |
| Semester  |  x Autumn ☐Spring |
| Year of study  | 2nd |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Dejan R. Dimitrijević |
| Teaching mode |  x Lectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Students will acquire wide spectrum of knowledge concerning ionized gasses and gaseous plasmas, criteria of the state of plasma, as well as various processes and occurrences in plasma. Strong emphasis will be given to the explanation of distinctive technical and technological processes in plasmas.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Plasma in nature and in laboratory. Collision processes in plasma. Collective interactions. Dynamics of plasma particles. Hydrodynamic description of plasma processes. Electromagnetic radiation from plasma. Elements of plasma diagnostics. Basic ideas of thermonuclear fusion.** |
| **LANGUAGE OF INSTRUCTION** |
| x 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** | **10** | **Written examination** |  |
| **Practical teaching** |  | **Oral examination** | **60** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |