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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | |  | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Physics | | |
| Study Module (if applicable) | | | | Applied Physics | | |
| Course title | | | | Physics of surfaces and thin films | | |
| Level of study | | | | ☐Bachelor  **x Master’s** ☐ Doctoral | | |
| Type of course | | | | **x** **Obligatory**  ☐ Elective | | |
| Semester | | | | **x Autumn**  ☐Spring | | |
| Year of study | | | | **First** | | |
| Number of ECTS allocated | | | | 6 | | |
| Name of lecturer/lecturers | | | | Pavlovic M. Tomislav, Lana S. Pantic Randjelovic (teaching assistant) | | |
| Teaching mode | | | | X Lectures ☐Group tutorials ☐ Individual tutorials  X Laboratory work ☐ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Acquired knowledge is essential for other courses such as Physics of materials and Physics of the plasma, etc.*  *To familiarize students with the contents of the surface and thin film physics.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| *Surface processes. Vacuum systems. Physical methods of depositing. Surface for deposition. Structural characteristics of thin films. Electrical characteristics of thin films. Mechanical characteristics of thin films. Optical characteristics of thin films. Types of optical thin films. Some applications of thin films and coatings.* | | | | | | |
| **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** | | | **20** |
| **Practical teaching** | **10** | | **Oral examination** | | | **20** |
| **Teaching colloquia** | **40** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |