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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Electronic Engineering | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Electrical Engineering and Computing** | | |
| Study Module (if applicable) | | | | Computing and Informatics | | |
| Course title | | | | Medical informatics | | |
| Level of study | | | | ☐Bachelor ☐ Master’s ☒ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒ Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | 2 | | |
| Number of ECTS allocated | | | | 10 | | |
| Name of lecturer/lecturers | | | | Prof. Dr. Dragan Janković | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work ☒ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Introducing students to the field of medical informatics and focusing on the reasons and the benefits of applying information and communication technologies along with corresponding statuses and perspectives.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **The definition of medical informatics. The importance and the role of medical informatics (quality, security, price, efficiency, research methods). Medical informatics and bioinformatics. Biomedical informatics. telemedicine. Medical information systems. Laboratory information systems. Clinical information systems. Telemedicine. Telediagnostics. The classes of information. Electronic patient record. Web based MIS. Interoperable MIS. Data and knowledge mining. Expert systems as a part of a MIS. Decision support systems. Data privacy and security. Medical data transfer standards. Medical imaging. DICOM. PACS. Data compression. Statistical data analysis. Data management and distribution. Data warehousing. Informational support for clinical researches.** | | | | | | |
| **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** | | | **50** |
| **Practical teaching** |  | | **Oral examination** | | | **50** |
| **Teaching colloquia** |  | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |