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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** | Faculty of Occupational Safety in Niš |
| **GENERAL INFORMATION** |
| Study program  | Environmental Protection |
| Study Module (if applicable) | / |
| Course title | Technical Materials |
| Level of study | ☒ Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☐ Autumn ☒Spring |
| Year of study  | Year: I |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Stanisa Stojiljković |
| Teaching mode | ☒ Lectures ☐Group tutorials ☐ Individual tutorials☐Laboratory work ☐ Project work ☒ Seminar☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Acquiring knowledge about technical materials, their place and role in the man‐environment‐material‐products system, and about their safety functions.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Technical materials – the term, state of necessity and natural reserves, recycling potential, closed circle of use. Material properties – physical properties, solidity, corrosive and anti‐corrosive properties. Materials to be safeguarded as resources for the preservation of human population: water, air, energy‐generating materials, and minerals (properties, indicators, energy potential). Technical materials in protection of humans and facilities – thermo‐isolation materials, electro‐isolation materials, fireproof materials, isolation materials in terms of vibro‐acoustics and noise, radiation protection materials, materials of the future. Metals – properties ofmetals and their alloys, properties significant for safety application; safety application of aluminium, copper, lead, zinc, and their alloys. Safety application of construction and fireproof ceramics. Technical materials in tribological safety of machines and devices. Technical materials protection system. Ecologic materials – natural materials for construction of ecologic objects. Expansion of knowledge acquired in theoretical lessons, tests,demonstrations |
| **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** | **10** | **Written examination** | **40** |
| **Practical teaching** | **20** | **Oral examination** |  |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |