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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Occupational Safety in Niš |
| **GENERAL INFORMATION** |
| Study program  | Occupational Safety |
| Study Module (if applicable) | / |
| Course title | Industrial Waste Treatment |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory ☒ Elective |
| Semester  | ☒ Autumn ☐Spring |
| Year of study  | IV |
| Number of ECTS allocated | 5 |
| Name of lecturer/lecturers | Nenad Živković |
| 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 waste generation in industrial systems, waste management methods, and features and application of waste treatment systems and devices.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Term and classification of waste. Manufacturing processes as waste generators: open and closed manufacture cycles. Categorization and characterization of waste from the manufacturing process. Norms and standards. Occupational and environmental hazards. Ecological dimensions of industrial waste management; term, definition, classification. Minimization of gaseous and liquid waste by treatment: separation of phases and transformation of phases. Devices for gaseous waste treatment. Systems and devices for wastewater treatment. Methods of solid waste treatment: disposal at dumps and landfills; physical and mechanical recycling methods; thermal methods, biothermal methods, composting. Devices for waste recycling, disposal, composting, incineration, gasification, and pyrolysis.** |
| **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** | **0** |
| **Practical teaching** | **20** | **Oral examination** | **40** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |