|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 | | | | 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** | | | | | | |