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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Technology | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | chemical technologies, food technology and biotechnology | | |
| Study Module (if applicable) | | | | FOOD TECHNOLOGY MODULE , BIOTECHNOLOGY MODULE, ORGANIC CHEMICAL TECHNOLOGY AND POLYMER ENGINEERING MODULE, ECOLOGICAL ENGINEERING MODULE, TEXTILE ENGINEERING MODULE | | |
| Course title | | | | Waste water treatment | | |
| Level of study | | | | ☒Bachelor ☐ Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒ Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | IV year | | |
| Number of ECTS allocated | | | | 6 | | |
| Name of lecturer/lecturers | | | | Ljiljana Takić | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work ☐ Project work ☒ Seminar  ☐Distance learning ☐ Blended learning ☒ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| Throughout the subject students should master the necessary and advanced knowledge of the wastewater treatment that is necessary for the control management as same as for the process design and equipment for waste water treatment. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Describe the engineering aspects of waste water. The origin and waste water dynamics. Characterization of wastewater (food and textile industry ...). Objectives of wastewater treatment, classification methods of purification. Mechanical, chemical and biological purification methods. Introduction to the design process for waste water treatment. Final-and additional waste water treatment. Re-use and wastewater discharge. The European Charter on Water. Installations for waste water treatment. Basic examples of calculation processes and system technology calculations for water treatment and waste water purification.  Practical teaching  Preparation and production of the project tasks related to the certain technological process in terms of the types and quantities of wastewater. | | | | | | |
| **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** | | | **30** |
| **Practical teaching** | **10** | | **Oral examination** | | | **50** |
| **Teaching colloquia** | **/** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |