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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** | Faculty of Technology |
| **GENERAL INFORMATION** |
| Study program  | Chemical Technologies |
| Study Module (if applicable) | Pharmaceutical and cosmetic engineering |
| Course title | Surfactant technology |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory☐ Elective |
| Semester  | ☐ Autumn ☒Spring |
| Year of study  | III  |
| Number of ECTS allocated | 6  |
| Name of lecturer/lecturers | Goran Nikolić |
| 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 obtaining, chemical properties, behavior, nature and the use of surfactants. Getting to know the characteristics of systems based on surfactants: detergents, soaps, cleaning surfaces, emulsifiers, solubilizers, foamers and antifoams. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Knowledge and use of raw material for surfactants, surfactant-based products, technological processes, devices and some appliances, through next main subjects:The structure and properties of a surfactant. The behavior of a surfactant. Micelles. Solubilization. Emulsifiers. Foaming and antifoaming. Wetting. Laundry. Technology of fat. Synthesis of surfactants and technological process of obtaining. Technology of soap. Technology of detergents. Application of surfactant in the pharmaceutical, cosmetic and other sectors of the chemical industry. Environmental aspects, degradation of surfactants, environmental pollutants. Precautionary measures. Legislation. |
| **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** | **20** | **Written examination** |  |
| **Practical teaching** | **20** | **Oral examination** | **60** |
| **Teaching colloquia** | **/** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |