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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | TECHNOLOGY |
| **GENERAL INFORMATION** |
| Study program  | CHEMICAL TECHNOLOGIES |
| Study Module (if applicable) | Pharmaceutical and cosmetic engineering, Organic chemical technology and polymer engineering |
| Course title | Technology gel, emulsions and suspensions |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | IV |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Stanisa Stojiljkovic, Goran Nikolić |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] Laboratory work [ ]  Project work [x]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Learning about real fluid gel-type emulsions and suspensions. Technological processes of the Examples of the gel, emulsion and suspension. Technology gel emulsions and suspensions in the food, cosmetic, pharmaceutical and technical industries construction.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Thermodynamics of macromolecular solutions. Thermodynamic relations with the macromolecular solution.Rheological properties of colloidal systems. Experimental methods of determining the thixotropy. Classification and types of gel. Examples of the gel formulation and gels conservation. Methods and technical preparation of the emulsion, emulsifying agents and HLB. Emulsion of sulphonated polymers in water and oil.**  |
| **LANGUAGE OF INSTRUCTION** |
| [x] 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** | **30** |
| **Teaching colloquia** | **40\*** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |