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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  |  |
| **GENERAL INFORMATION** |
| Study program  | CHEMICAL TECHNOLOGIES, FOOD TECHNOLOGY AND BIOTECHNOLOGY |
| Study Module (if applicable) | ORGANIC CHEMICAL TECHNOLOGY AND POLYMER ENGINEERING MODULE, PHARMACEUTICAL AND COSMETIC ENGINEERING MODULE, FOOD TECHNOLOGY MODULE |
| Course title | Packing materials and packaging |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [x]  Obligatory [x]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | 3, 4 |
| Number of ECTS allocated | 4 |
| Name of lecturer/lecturers | Staniša Stojiljković, Suzana Cakić |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [x]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| The main objective of this teaching program is to inform students about packaging materials. Monitoring the contemporary trends in the development of application of packaging materials. Studying the interaction of materials and food products. Training students to choose a suitable packaging and packaging material for food, cosmetics, pharmaceuticals etc. By obtaining knowledge and insight into the packaging materials suitable packaging should fulfill a protective function, safety, economic and environmental acceptability. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Definition and purpose of the packaging. The influence of oxygen, light and moisture on the quality of packaged content. Corrosion (chemical and electrochemical). Types of packaging materials: metals, glass, polymers, elastomers, biodegradable plastics, paper and paperboard, textile materials, wood. synthetic coatings and coatings), edible packaging materials (coatings based on saccharide, protein coatings, wax coatings). Packaging tinplate and aluminum sheet metal, glass, paper, paperboard, polymer and composite containers, aerosol containers, packaging styrofoam and design packaging. Processing of polymer materials for packaging. The conditions of modern packaging of food products in modified atmosphere. Active and intelligent packaging materials. |
| **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** | **/** |
| **Practical teaching** | **/** | **Oral examination** | **50** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |