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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Technology |
| **GENERAL INFORMATION** |
| Study program  | Food technology and biotechnology, chemical technologies  |
| Study Module (if applicable) | Pharmaceutical and cosmetic engineering, organic chemical technology and polymer engineering, ecological engineering, biotechnology.  |
| Course title | Technology of natural organic products |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory ☒ Elective |
| Semester  |  ☐ Autumn ☒Spring |
| Year of study  | III , IV  |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Ljiljana Stanojević |
| 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 the natural forms, biological properties and functions in the organisms, technologies, equipment, production plants, characterization and quality standardization of isolates from raw natural materials for further use in chemical industry, food industry and biotechnology. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Developing the students' ability to use the knowledge in the research, quality control and preparation of natural raw materials for the production of natural products in the chemical and food industry and biotechnology. Developing the ability to improve different technologies through the next subjects: natural organic compounds, pulverise, cellular juices, fatty and essential oils. Extracts (total extracts and extracts fractions, liquid, solid, semi-solid; resinoids, absolute oils …), distillates, precipitates, crystals, sublimates. The natural bioactive products in organic technology, food technology and biotechnology. The technological characteristics of the raw materials. Apparatus, devices and installations for the production of natural organic products. Technologies of bioactive products: protein isolates, glutamic acid and sodium glutamate, lactose, maltose and maltose syrup, pectin isolates, vegetable oils, phosphatides, natural alkaloids. Discontinuous technology of essential oils production and continuous distillation of essential oils. Technology of corrigens, antioxidants and preservatives production. Characterization and standardisation of natural products. |
| **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** | **5** | **Written examination** |  |
| **Practical teaching** | **15** | **Oral examination** | **60** |
| **Teaching colloquia/Seminar** | **20** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |