|  |
| --- |
|  **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 | Quality control of pharmaceutical products |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory☐ Elective |
| Semester  | ☐ Autumn ☒Spring |
| Year of study  | IV  |
| 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 in the field of analysis and quality control of pharmaceutical active substances and pharmaceutical products. Introduction to the legal regulations in the field of pharmaceutical analysis and quality control of medicines. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Training students to work independently in control, research and development laboratories for testing and control of drugs, through next main subjects:Legislation for the quality of pharmaceutical products. Statistical methods in analytics and control of medicines. Profile of pharmaceutical substances. Flow analysis of both known and unknown pharmaceutical substances. Criteria for the selection of analysis methods. Officinal chemical reactions and derivatization. Extraction methods. Officinal titrimetric methods. Thermal methods (DTA, DTG, DSC). Officinal spectroscopic methods (UV-VIS, IR). Optical methods of analysis. Chromatographic methods (TLC, GPC, HPLC, GC) of the pharmaceutical analysis. Identification of impurities and degradation 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** | **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** |