|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Sciences and Mathematics  Department of Chemistry. | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Applied Chemistry** | | |
| Study Module (if applicable) | | | |  | | |
| Course title | | | | **Applied Organic Chemistry** | | |
| Level of study | | | | ☐ Bachelor X Master’s ☐ Doctoral | | |
| Type of course | | | | X Obligatory ☐ Elective | | |
| Semester | | | | ☐ Autumn X Spring | | |
| Year of study | | | | first | | |
| Number of ECTS allocated | | | | 7 | | |
| Name of lecturer/lecturers | | | | Goran M Petrović | | |
| Teaching mode | | | | X Lectures x Group tutorials ☐ Individual tutorials  x Laboratory work ☐ Project work x Seminar  ☐ Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| Acquiring knowledge about the important industrial organic compounds and reactions. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| *Theorectical lectures*  Introduction. Oil as a raw material. Processes of petroleum refinery. Raw materials for the industry of organic compounds, hydrocarbons, oxygen compounds, polymer organic compounds. Pharmaceutical industrial chemistry; 9. Overview of functional groups important to the chemistry of drugs; 10. Industrially important chemical reactions: alkylation, amination, condensation, addition, dehydratation, dehydrogenization, esterification, halogenation, fermentation, hydratation, hydrogenization, hydrolysis, hydroformylation, nitrification, oxidation.  *Practical training: Exercises, Other forms of teaching, Study and research work*  Introduction class. Introducing students to the exercise program, the behavior in the laboratory, their tasks and obligations. Preparation of caprolactam. Preparation of polyamide. Professional practice in the relevant industrial plants. | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| x Serbian (complete course) ☐ English (complete course) ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)  xSerbian with English mentoring ☐Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | |
| **ASSESSMENT METHODS AND CRITERIA** | | | | | | |
| **Pre exam duties** | **Points** | | **Final exam** | | | **points** |
| **Activity during lectures** | 5 | | **Written examination** | | | 40 |
| **Practical teaching** | 15 | | **Oral examination** | | |  |
| **Teaching colloquia** | 40 | | **OVERALL SUM** | | | 100 |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |