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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | Faculty  | Faculty of Science and Mathematics |
| GENERAL INFORMATION |
| Study program  | Applied Chemistry |
| Study Module (if applicable) | Applied Chemistry |
| Course title | Kinetic methods of analysis |
| Level of study | ☐Bachelor x Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory x Elective |
| Semester  |  ☐ Autumn x Spring |
| Year of study  | 2nd |
| Number of ECTS allocated | 4 |
| Name of lecturer/lecturers | Snezana Mitic |
| Teaching mode |  x Lectures ☐Group tutorials ☐ Individual tutorials ☐Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *The purpose of this course is to introduce the basic principles of kinetic methods of analysis and recognize**appropriate methods in relation to experimental requirements.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Introduction to kinetic methods of analysis. Catalytic reactions. Kinetic equations and the mechanism of reaction. Homogeneous catalytic reactions. Application of catalytic reactions in analytical purposes. Development and validation of kinetic methods of analysis. Activators and Promoters. Mechanism of reactions. Catalytic titration. Titration curves.****Non-catalytic reaction. Methods for determination. Enzyme kinetics. Characterization of the enzyme activity. Models of catalysis. Analysis of real samples.** |
| **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** | **5** | **Written examination** | **/** |
| **Practical teaching** | **25** | **Oral examination** | **40** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |