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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Science and Mathematics |
| **GENERAL INFORMATION** |
| Study program  | **Chemistry** |
| Study Module (if applicable) | - |
| Course title | Selected chapters of volumetric analysis |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | 2 |
| Number of ECTS allocated | 4 |
| Name of lecturer/lecturers | Vesna Stankov Jovanović |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] Laboratory work [ ]  Project work [x]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| The deepening of both theoretical and practical knowledge about the quantitative methods of analysis, understanding the characteristics of selected methods, proper selection of the analytical method, presentation and interpretation of the results obtained using volumetric analysis.The students’ competences are strengthened for independent work in analytical laboratories, regarding theoretical knowledge and capability for work in laboratories for quality control of semi-finished and finished products in various fields. The knowledge acquired within this course provides solid base for continuing further education in analytical chemistry. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Titration curves for complex acid-base systems. Titration of poly-protic acids and poly-hydroxil bases. Titration of a mixture of strong and weak acids. Titration of a mixture of strong and weak base. Titration of amfiprotic substances. Titrations in non-aqueous solutions. Precipitation titrations. Argentometry. Mercurimetry. Redox titrations. Cerimetric, dichromatometric and bromatometric titrations. Titration of a mixture of reductants and oxidants. Titration using aminopolycarboxylic acids. Titrations with inorganic complexing reagents. Simultaneous complexometric titrations. |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [x]  English (complete course) [x]  Other Russian (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** | **30** |
| **Practical teaching** | **40** | **Oral examination** |  |
| **Teaching colloquia** | **25** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |