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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) | Applied chemistry |
| Course title | Bioanalytical chemistry |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | second |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Ivana Rašić Mišić |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Acquiring theoretical and practical knowledge about: bioanalytical chemistry, analytical techniques applied to analysis of biomolecules, validation of new bioanalytical methods. Successfully finished course qualifies student to make adequate selection of bioanalytical methods and applied them to real sample analysis.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Spectroscopic methods for matrix characterization (total protein, DNA, RNA, carbohydrate and fatty acid quantitation).****Enzymes. Enzymes kinetics. Quantitation of enzymes and their substrates. Immobilized enzymes. Antibodies. Biosensors. Chromatography of biomolecules. Mass spectrometry of biomolecules.****Validation of new bioanalytical methods.** |
| **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** | **45** |
| **Practical teaching** | **20** | **Oral examination** |  |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |