|  |
| --- |
|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  |  |
| **GENERAL INFORMATION** |
| Study program  | Undergraduate: Chemistry |
| Study Module (if applicable) |  |
| Course title | Analitical Chemistry 2 |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [x]  Obligatory [ ]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | second |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Violeta Mitić |
| 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)** |
| Learning objectives for this course will focus on developing a fundamental understanding of the following topics as they relate to o the theory and practice of quantitative analysis –.Gravimetry**.** Through participation in course activities, each student should expect to improve her/his knowledge of analytical chemistry and to develop improved qualitative and quantitative problem-solving skills. Hands-on experience with laboratory experiments will allow students to learn proper procedures, to gather meaningful data, and to draw logical and appropriate conclusions based on the laboratory data.All Labs must be done and reports submitted to obtain a passing grade for this course. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Overview of gravimetric methods -types of gravimetric methods,precipitative gravimetric analysis, volatilization gravimetry thermogravimetry and combustion analysisRelative Supersaturation, controlling particle sizeHmogeneous precipitationCoagulation, peptizationFiltering the precipitateImpurities in precipitates – occlusion, inclusion, surface adsorption Postprecipitation, reprecipitation, digestionDrying the precipitateGravimetric calculationsEvaluating precipitation gravimetry - scale of operation, accuracy, precision, sensitivity, selectivity, F-test, t-test, time, cost, and equipmentQuantitative applications |
| **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** | **15** |
| **Practical teaching** | **25** | **Oral examination** | **15** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |