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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  |  |
| **GENERAL INFORMATION** |
| Study program  | Postgraduate: Applied Chemistry |
| Study Module (if applicable) | Applied chemistry; Environmental Chemistry  |
| Course title | Food Chemistry Analysis |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | first |
| Number of ECTS allocated | 3 |
| Name of lecturer/lecturers | Violeta Mitić |
| Teaching mode |  [x] Lectures [x] Group tutorials [x]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| The goal of the course is to provide profound and detailed scientific knowledge and understanding of chemical, methods for analysis of raw materials and foods including the skills to identify and use such methods in the context of research, process and product design and optimization and food control.In the practical exercises students get acquainted to the chemical analysis of foods and agricultural raw materials both from a theoretical and practical point of view. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Introduction to chemistry of foodsVarious metallic elements occurring in foods. Level of occur. Analysis of metallic elements. Importance of total ash/acid in soluble and their estimationWater activity and its influence on food quality and stability. Determination of water content in foodsOccurrence and classification of food carbohydrates. Properties of food carbohydrates. Analysis of food carbohydratesIntroduction and definition of lipids and their classificationFatty acid composition and physical and chemical characteristics, Various methods used for measurement of fats and fatty foodsChemistry and classification of amino acids and proteins. Chemical and biological evaluation of nutritional quality of proteins.Aditives, their occurrence and characteristic properties. |
| **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** | **0** |
| **Practical teaching** | **25** | **Oral examination** | **30** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |