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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Sciences and Mathematics |
| **GENERAL INFORMATION** |
| Study program  | Chemistry  |
| Study Module (if applicable) | - |
| Course title | Computer Applications in Chemistry |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [x]  Obligatory [ ]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | first |
| Number of ECTS allocated | 3 |
| Name of lecturer/lecturers | Aleksandar Stamenković |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [x]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Acquiring basic knowledge in the field of computer science. Introduction to software tools for scientific applications mainlky in chemistry, such as word processing and spreadsheet calculating. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Historical development of computation methods from abacus to modern computers. Basic functions of computers and the computer organization. Number systems and different methods for conversion numbers from one to onother system. Basic computer hardware components and their functioninig: CPU, motherboard, memory, peripherals… Computer software: system software, operating system and basic user applications (Microsoft Office). Multimedia, computer networks and Internet.Microsoft Excel: Formatting tables, field types, referencing tables. Basic Excel functions: Sum, Average, Max, And, Or, If, SUMIF, CountIf, Lookup, ... Advanced functions derived from the basic ones. |
| **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** | **10** | **Written examination** | **40** |
| **Practical teaching** | **50** | **Oral examination** | **-** |
| **Teaching colloquia** | **-** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |