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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | **Faculty of Sciences and Mathematics**  **Department of Biology and Ecology** | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Computer Science** | | |
| Study Module (if applicable) | | | | ­/ | | |
| Course title | | | | **Selected Chapters of Molecular Biology** | | |
| Level of study | | | | ☐Bachelor ☐ Master’s ☒ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | Second | | |
| Number of ECTS allocated | | | | 12 | | |
| Name of lecturer/lecturers | | | | Tatjana Mitrović | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work ☐ Project work ☒ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Introduction to molecular basis of life and transfer of bioinformations in nature. Understanding of modern trends in bioinformation analysis.* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **Informativeness of biomolecules and evolution of genetic information. Primary and secondary structure of DNA. Genome and genomics. Structure of eukaryotic genome (repetitive and unique sequences). Structure of prokaryotic and eukaryotic genes. Genetic code. Trasfer of genetic information in the cell. DNA sequencing. DNA chips. Bioinformatics.** | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| ☒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** | | | **/** |
| **Practical teaching** | **/** | | **Oral examination** | | | **40** |
| **Teaching colloquia** | **55** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |