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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  | **Biology** |
| Study Module (if applicable) | / |
| Course title | **Molecular Biology** |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  |  ☐ Autumn ☒Spring |
| Year of study  | Third |
| Number of ECTS allocated | 5 |
| 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)** |
| *Acquiring of knowledge about the molecular basis of life. Understanding of the mechanisms and regulation of the gene expression.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Molecular biology – subject and history. DNA as molecular carrier of genetic information. Chromatin – structure and organization. DNA – primary and secondary structure. Denaturation and renaturation of DNA. Hybridization of DNA. Genetic code. The regulation of gene expression in prokaryotes and eukaryotes. Replication in prokaryotes and eukaryotes. Transcription in prokaryotes and eukaryotes. Translation in prokaryotes and eukaryotes. Mitochondrial DNA.** |
| **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+5** | **Written examination** | **/** |
| **Practical teaching** | **20** | **Oral examination** | **40** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |