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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 | | | | Cell physiology | | |
| Level of study | | | | ☐Bachelor ☒ Master’s ☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory ☒ Elective | | |
| Semester | | | | ☐ Autumn ☒Spring | | |
| Year of study | | | | first | | |
| Number of ECTS allocated | | | | 6 | | |
| Name of lecturer/lecturers | | | | Perica Vasiljević | | |
| Teaching mode | | | | ☒Lectures ☐Group tutorials ☐ Individual tutorials  ☒ Laboratory work ☐ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| **Understanding of basic cellular and molecular mechanisms in different physiological processes: membrane transport, biosynthesis in GA and ER, transduction of signals, cell-cell and cell-ECM interactions, cancer biologa, mechanisms of programmed cell death.** | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **Cell membrane physiology. Membrane pumps. Membrane canals. Hemiosmotic cycle. Epithelial transport. Regulation of cell volume. Thermodynamics of biological systems. Signaling pathways. Cell receptors. Signal integration.** | | | | | | |
| **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** | **10** | | **Written examination** | | | **20** |
| **Seminar** | **20** | | **Oral examination** | | | **30** |
| **Teaching colloquia** | **20** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |