



Course ID:	Course name: GENERAL BIOLOGY		
Cycle: FIRST	Year: FIRST	Semester: II	ECTS credits: 2
Course status: MANDATORY		Total course hours: 30 Lectures: 30	
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs		
Prerequisite for enrollment:	-		
Course aims:	Understanding the fundamental characteristics and functioning of life at the cellular and molecular levels.		
Thematic course units:	<ol style="list-style-type: none">1. Introduction. Biology and its branches of research. Application of biology in various fields of human activity.2. General properties of the living world. Levels of biological organization. Biodiversity and the classification of the living world.3. Structure and function of prokaryotic cells.4. Structure and function of eukaryotic cells. Plant and animal cell. Cellular organelles Part 15. Cellular organelles Part 26. Cellular energy. Respiration. Fermentation. Photosynthesis.7. Viruses and subviral agents. Infectious cycle of the virus.8. Test9. The structure of the DNA molecule. DNA replication. Structure and function of cellular RNA.10. Transcription and translation of genetic information.11. Cell cycle. Mitosis. Meiosis. Apoptosis.12. Reproduction of organisms. Asexual and sexual reproduction. Fertilization and embryonic development.13. Genes and inheritance. Mendel's laws of inheritance.14. Human genetics. Monogenic and polygenic properties. Types of inheritance in humans.15. Genetic engineering and biotechnology. Red, green, blue		

	and white biotechnology.																																													
Learning outcomes:	<p>Knowledge: Acquisition of fundamental knowledge about biological phenomena, processes and laws in accordance with modern scientific achievements.</p> <p>Skills: Knowledge of cell structure and function, basics of molecular biology and genetics.</p> <p>Competences: Ability for critical thinking, individual and group activities and research and application of acquired knowledge in biology.</p>																																													
Teaching methodology:	Multimedia presentation i discussion																																													
Assessment methods and grading system¹:	<table border="1"> <thead> <tr> <th colspan="3">Grading criteria</th> </tr> <tr> <th>Criteria</th> <th>Maximal score</th> <th>Required score</th> </tr> </thead> <tbody> <tr> <td>1. Class attendance</td> <td>5</td> <td>3</td> </tr> <tr> <td>2. Class activities</td> <td>15</td> <td>8</td> </tr> <tr> <td>3. Midterms</td> <td>40</td> <td>22</td> </tr> <tr> <td>4. Final exam</td> <td>40</td> <td>22</td> </tr> <tr> <td>Total</td> <td>100</td> <td>55</td> </tr> <tr> <th colspan="3">Scores and grading</th> </tr> <tr> <th>Score</th> <th>Grade (B&H)</th> <th>Grade (ECTS)</th> </tr> <tr> <td>< 55</td> <td>5</td> <td>F, FX</td> </tr> <tr> <td>55-64</td> <td>6</td> <td>E</td> </tr> <tr> <td>65-74</td> <td>7</td> <td>D</td> </tr> <tr> <td>75-84</td> <td>8</td> <td>C</td> </tr> <tr> <td>85-94</td> <td>9</td> <td>B</td> </tr> <tr> <td>95-100</td> <td>10</td> <td>A</td> </tr> </tbody> </table>	Grading criteria			Criteria	Maximal score	Required score	1. Class attendance	5	3	2. Class activities	15	8	3. Midterms	40	22	4. Final exam	40	22	Total	100	55	Scores and grading			Score	Grade (B&H)	Grade (ECTS)	< 55	5	F, FX	55-64	6	E	65-74	7	D	75-84	8	C	85-94	9	B	95-100	10	A
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Literature²:	<p>Mandatory literature:</p> <ol style="list-style-type: none"> 1. Jerković-Mujkić A., Pilić S. (2014). Priručnik za vježbe iz citologije. Prirodno-matematički fakultet Sarajevo. <p>Supplementary literature:</p> <ol style="list-style-type: none"> 1. Đuričić E. Terzić T., Kapović M., Peterlin B. (2005). Biologija sa humanom genetikom. Medicinski fakultet, Sarajevo. 2. Hasanbašić D (2001). Osnovi biologije. Veterinarski 																																													

¹ The grading structure for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught as per Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

² The Senate of the higher education institution, as an institution, or the Council of the organizational unit of the higher education institution, as a public institution, determines by a special decision, which is published on its website before the beginning of the academic year obligatory, mandatory and recommended textbooks and manuals, as well as other recommended literature based on which exams are prepared and taken as per Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton

fakultet, Sarajevo, 2001.