



Subject code: FG-204-2		Subject name: Hydrology	
Study cycle: I	Year: II	Semester: III	ECTS credits: 6
Status: Mandatory		Contact hours: 60 Lectures: 30 Practical courses: 30	
Assigned professors and assistants:	Lecturers and assistants selected for the field to which the course belongs		
Prerequisites:	/		
Subject objectives:	Object of study of hydrosphere are finding processes and phenomena that are consequence of state physical geographic factors in a given geographical expanses. Students will gain knowledge about water in underground streams, lakes and water in ice, they will recognize the essence of the impact of inland waters on the processes that are relevant to physical geographical processes and phenomena. During the teaching-scientific process it is necessary to acquire knowledge about the World Ocean unity and division, physical and chemical characteristics of sea water; dynamic processes and phenomena in it.		
Teaching units:	1. Hydrology. Object, subject, classification and tasks. 2. Hydrogeology. The free groundwater. 3. The sources and springs. 4. River system and river network. 5. The river valley. 6. The dynamics of river water. River regimes and water balance. 7. First test. 8. The genesis and evolution of the lake. Water in lake basins. 9. Physical and chemical properties of lake water. Lake water dynamics. 10. Types of the glacier. The geographical distribution of ice on Earth. 11. Origin and types of wetlands. Wetland hydrological system. 12. The World Ocean. The geographical boundaries of individual oceans. Relief bottom of the World Ocean. 13. The basic chemical and physical characteristics of seawater. 14. Dynamical properties of the World Sea. Waves. Tides. 15. Sea and ocean currents. The level of the World Ocean.		



Learning outcomes:	Knowledge: - the student critically learns about hydrological processes and phenomena that are a consequence of the state of physical-geographical factors of a certain geographical area; - the student identifies all the essential elements related to groundwater, streams, lakes, ponds and wetlands and water in the form of ice; - the student explains the relationship between physical and geographical processes and phenomena and their impact on inland waters; - students master the knowledge of the World Ocean, unity and division, physical and chemical properties of sea water; dynamic processes and phenomena in it; Skills: - the student independently performs tasks related to morphometric characteristics in the river and lake basin; - the student independently performs tasks related to the analysis of the elements of the river regime and the calculation of the water balance; - the student assesses the mutual influences of physical-geographical factors in the river basin; - the student independently performs tasks related to the indentation of the sea and ocean coast and the analysis of the relief of the sea and ocean floor; Competencies: - the student independently interprets hydrological concepts, water properties and characteristics of inland waters; - the student independently determines and causally considers the main patterns in the course of hydrological processes and phenomena in the Earth's water mantle.												
Teaching methods:	Multimedia presentation and discussion (lectures); practical work, educational material analysis and discussion (practical courses).												
Knowledge testing methods with grading structure¹:	<table><tr><td></td><td><i>Maximum points</i></td><td><i>Minimum points</i></td></tr><tr><td>Attendance</td><td>5</td><td>3</td></tr><tr><td>Participation on lectures</td><td>5</td><td>3</td></tr><tr><td>Tests</td><td>40</td><td>22</td></tr></table>		<i>Maximum points</i>	<i>Minimum points</i>	Attendance	5	3	Participation on lectures	5	3	Tests	40	22
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¹ The structure of points and point criteria 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 in accordance with Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton



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SUBJECT DESCRIPTION

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	<table><tr><td>Seminar paper/Practicum</td><td>10</td><td>6</td></tr><tr><td>Final exam</td><td>40</td><td>21</td></tr><tr><td colspan="2"></td><td></td></tr><tr><td>TOTAL</td><td>100</td><td>55</td></tr></table>	Seminar paper/Practicum	10	6	Final exam	40	21				TOTAL	100	55												
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Literature²:	Mandatory: 1. Spahić, M: Hidrologija kopna, Sarajevo publishing, Sarajevo 2013. 2. Spahić, M.: Okeanografija, Posebna izdanja GD FBiH, Harfo-graf, Tuzla 2005. 3. Korjenić, A., Temimović, E.: Praktikum iz Hidrografije kopna I, Prirodno-matematički fakultet u Sarajevu, Sarajevo 2016. Recommended: 1. Dukić, D.: Hidrologija kopna, Naučna knjiga, Beograd 1988. 2. Riđanović, J.: Hidrogeografija, Školska knjiga, Zagreb 1989.																								

² The Senate of the higher education institution as an institution or a council of the organizational unit of the higher education institution as a public institution determines mandatory and recommended textbooks and manuals, as well as other recommended literature on the basis of which exams are prepared by a special act which is required to be published on its website before the beginning of the academic year in accordance with Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton.