



<b>Subject code:</b> RPP-305-2	<b>Subject name:</b> Clime and water in regional and spatial planning		
<b>Study cycle:</b> I	<b>Year:</b> III	<b>Semester:</b> V	<b>ECTS credits:</b> 5
<b>Status:</b> Mandatory		<b>Contact hours:</b> 60 Lectures: 30 Exercises: 30	
<b>Assigned professors and assistants:</b>	Teachers and associates selected in the field to which the subject belongs		
<b>Prerequisites:</b>	/		
<b>Subject objectives:</b>	The main objectives are: <ul style="list-style-type: none"><li>- Exploring and acquiring knowledge about the application of climatic resources in regional and spatial planning;</li><li>- Exploring and acquiring knowledge about the application of the water resources in the regional and spatial planning;</li><li>- Exploring and acquiring knowledge about the content and structure of sets of thematic climatic and hydrological maps for the purposes of identification and evaluation of hydro-climatic potential in the regional and spatial planning;</li><li>- Exploring and acquiring knowledge about the application of modern GIS models and techniques of remote sensing in the evaluation of hydro-climatic potential in regional and spatial planning;</li><li>- Exploring and acquiring knowledge about water and climate resources for the purpose of regional and spatial planning in Bosnia and Herzegovina.</li></ul>		
<b>Teaching units:</b>	<ol style="list-style-type: none"><li>1. Hydro-climatic basis of regional and spatial plans. Methodological concept of identification and evaluation of basic hydro-climatic parameters in spatial plans of different levels of regional and spatial planning.</li><li>2. The main climatic elements and their application in spatial plans of different levels of regional and spatial planning. Solar radiation and duration of sunshine - evaluation and implementation in regional and spatial plans. Application of annual and seasonal isohel maps in regional and spatial planning. Practical analytical work of students on selected examples.</li><li>3. Valorisation of air temperatures in regional and spatial plans. Application of annual and seasonal maps of isotherms in regional and spatial planning. Practical analytical work of students on selected examples.</li><li>4. Valorisation of humidity and cloudiness in regional and spatial planning. Application of annual and seasonal</li></ol>		



- isohygro and isoneph maps - in regional and spatial planning. Practical analytical work of students on selected examples.
5. Valorisation of precipitation in regional and spatial planning. Application of annual and seasonal isohyet maps in regional and spatial planning. Practical analytical work of students on selected examples. Valorisation of wind in regional and spatial planning. Application of annual season maps of wind speed and direction in regional and spatial planning. Practical analytical work of students on selected examples.
  6. Weather disasters in regional and spatial plans. Application of annual and seasonal maps of weather disasters in regional and spatial planning. Practical analytical work of students on selected examples. Valorisation of climate types in regional and spatial plans. Development and implementation of climate types maps in regional and spatial planning. Practical analytical work of students on selected examples.
  7. The first test
  8. The main hydrological parameters and their application in regional and spatial plans of different levels of planning. Thematical hydrological mapping in regional and spatial plans of different levels of planning.
  9. River basin and river networks and their application in regional and spatial planning.
  10. Water supply in regional and spatial plans of different levels of planning. Water supply of the population and economy in regional and spatial plans of different levels of planning.
  11. Valorisation of watercourses in regional and spatial plans. Application of maps of streams and river profiles in regional and spatial planning. Practical analytical work of students at selected examples.
  12. Valorisation of lakes in regional and spatial planning. Application of maps of lakes in regional and spatial planning. Practical analytical work of students on selected examples.
  13. River sources - valorisation and application in regional and spatial plans. Application of maps of sources in regional and spatial planning. Practical analytical work of students on selected examples.
  14. Defining and valorisation of water protection zones in regional and spatial planning. Implementation of



	<p>measures to protect water protection zones in regional and spatial planning. Practical analytical work of students on selected examples.</p> <p>15. Waste water in regional and spatial planning. Surveying and mapping sewage. Measures to protect the population and adequate economic branches of wastewater in regional and spatial planning. Practical analytical work of students on selected examples.</p>																					
<b>Learning outcomes:</b>	<p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>the student acquires knowledge about the application of climate potentials in regional and spatial planning;</li> <li>the student acquires knowledge about the application of water potentials in regional and spatial planning;</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>the student is able to independently create and analyze the content and structure of sets of thematic climate and hydrological maps for the needs of identification and valorization of hydro-climate potentials in regional and spatial planning;</li> <li>the student is able to independently apply modern GIS models and remote sensing techniques in the valorization of hydro-climatic potentials in regional and spatial planning;</li> </ul> <p><b>Competencies:</b></p> <ul style="list-style-type: none"> <li>the student can independently apply the acquired knowledge about water and climate potentials and participate in the preparation of studies for the needs of regional and spatial planning in Bosnia and Herzegovina.</li> </ul>																					
<b>Teaching methods:</b>	<p>Multimedia presentation and discussion (lectures); practical work, educational material analysis and discussion (exercises).</p>																					
<b>Knowledge testing methods with grading structure<sup>1</sup>:</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><i>Maximum Points</i></th> <th style="text-align: center;"><i>Minimum points</i></th> </tr> </thead> <tbody> <tr> <td>Attendance</td> <td style="text-align: center;">5</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Participation on lectures</td> <td style="text-align: center;">5</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Tests</td> <td style="text-align: center;">40</td> <td style="text-align: center;">22</td> </tr> <tr> <td>Seminar paper</td> <td style="text-align: center;">10</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Final exam</td> <td style="text-align: center;">40</td> <td style="text-align: center;">21</td> </tr> <tr> <td><b>TOTAL</b></td> <td style="text-align: center;"><b>100</b></td> <td style="text-align: center;"><b>55</b></td> </tr> </tbody> </table> <p><b>Assessment:</b></p>		<i>Maximum Points</i>	<i>Minimum points</i>	Attendance	5	3	Participation on lectures	5	3	Tests	40	22	Seminar paper	10	6	Final exam	40	21	<b>TOTAL</b>	<b>100</b>	<b>55</b>
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<sup>1</sup> 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



	<i>Grade</i>	<i>ECTS grade</i>	<i>Points scale</i>
	10	(A) excellent	95 - 100
	9	(B) very good	85 - 94
	8	(C) good	75 - 84
	7	(D) satisfactory	66 - 74
	6	(E) sufficient	55 - 64
	5	(F, FX) insufficient	55
<b>Literature<sup>2</sup>:</b>	<b>Mandatory:</b> <ol style="list-style-type: none"><li>1. Đorđević, J. (2004.): Tipologija fizičko- geografskih faktora u prostornom planiranju. Beograd.</li><li>2. Kicošev, S., Dunčić, D. (1998.): Geografske osnove prostornog planiranja, Institut za geografiju PMF Novi Sad, Novi Sad.</li><li>3. Marinović – Uzelac (1989): Teorija namjene površina u urbanizmu. Zagreb.</li><li>4. Gavrilović, Lj. (1988): Hidrologija u prostornom planiranju, Prirodno-matematički fakultet, Univerzitet u Beogradu, Beograd.</li></ol> <b>Recommended:</b> <ol style="list-style-type: none"><li>1. Korjenić, A., Temimović, E. (2016): Praktikum iz Hidrografije kopna I, Prirodno-matematički fakultet u Sarajevu, Sarajevo.</li><li>2. Dorić, B. (1988): Geografske osnove prostornog planiranja, Zavod za urbanizam Vojvodine. Novi Sad.</li></ol>		

<sup>2</sup> 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.