



UNIVERSITY OF SARAJEVO – FACULTY OF SCIENCE  
SUBJECT DESCRIPTION

Form SP2

Page 1 of 3

<b>Subject code:</b> <i>GE-301.8-1</i>	<b>Subject name: Natural Resources and Their Protection</b>		
<b>Study cycle:</b> <i>I</i>	<b>Year:</b> <i>IV</i>	<b>Semester:</b> <i>VI</i>	<b>ECTS credits:</b> <i>3</i>
<b>Status:</b> <i>Optional</i>		<b>Contact hours:</b> <b>45</b>  <i>Lectures: 30</i> <i>Exercises: 15</i>	
<b>Assigned professors and assistants:</b>			
<b>Prerequisites:</b>	/		
<b>Subject objectives:</b>	<i>The importance of generation, evaluation and preservation of natural resources important to the development and progress of mankind. Detection of causal relationships and connections between the elements of the natural environment and antropopressing. The importance of protecting natural resources ie. natural conditions and resources.</i>		
<b>Teaching units:</b>	<ol style="list-style-type: none"><li><i>1. Introduction</i></li><li><i>2. Natural resources – concept and classification</i></li><li><i>3. Principles and methods of natural resources evaluation</i></li><li><i>4. Fossil fuels</i></li><li><i>5. Metallic and non-metallic raw materials</i></li><li><i>6. Geothermal energy</i></li><li><i>7. Test</i></li><li><i>8. Solar energy</i></li><li><i>9. Wind energy</i></li><li><i>10. Hydropower</i></li><li><i>11. Tidal energy and wave energy</i></li><li><i>12. Biosphere as a natural resource</i></li><li><i>13. Pedosphere as a natural resource</i></li><li><i>14. Management and sustainable use of natural resources</i></li><li><i>15. Protection of natural resources</i></li></ol>		
<b>Learning outcomes:</b>	<b>Knowledge:</b> <ul style="list-style-type: none"><li><i>• student understands the concept of natural resources;</i></li><li><i>• student recognizes natural resources of a particular area;</i></li></ul>		



	<ul style="list-style-type: none"> <li>• <i>student understands and explains the differences between renewable and non-renewable energy sources;</i></li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• <i>student independently analyzes the natural resource base and assesses its suitability for the development of economic activities in a certain area;</i></li> </ul> <p><b>Competencies:</b></p> <ul style="list-style-type: none"> <li>• <i>student independently valorizes the resource base of Bosnia and Herzegovina</i></li> <li>• <i>student independently valorizes natural resources in the context of sustainable development</i></li> </ul>																																																
<b>Teaching methods:</b>	<i>Multimedia presentation and discussion (lectures); practical work, educational material analysis and discussion (exercises).</i>																																																
<b>Knowledge testing methods with grading structure<sup>1</sup>:</b>	<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th colspan="2" style="text-align: center;"><i>Points</i></th> </tr> </thead> <tbody> <tr> <td><i>Attendance</i></td> <td style="text-align: center;"><i>5</i></td> <td style="text-align: center;"><i>3</i></td> </tr> <tr> <td><i>Participation on lectures</i></td> <td style="text-align: center;"><i>5</i></td> <td style="text-align: center;"><i>3</i></td> </tr> <tr> <td><i>Tests</i></td> <td style="text-align: center;"><i>40</i></td> <td style="text-align: center;"><i>22</i></td> </tr> <tr> <td><i>Seminar paper</i></td> <td style="text-align: center;"><i>10</i></td> <td style="text-align: center;"><i>5</i></td> </tr> <tr> <td><i>Final exam</i></td> <td style="text-align: center;"><i>40</i></td> <td style="text-align: center;"><i>22</i></td> </tr> <tr> <td><i>TOTAL</i></td> <td style="text-align: center;"><i>100</i></td> <td style="text-align: center;"><i>55</i></td> </tr> </tbody> </table> <p><b>Assessment:</b></p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th><i>Grade</i></th> <th><i>ECTS grade</i></th> <th><i>Points scale</i></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><i>10</i></td> <td><i>(A) excellent</i></td> <td style="text-align: center;"><i>95 - 100</i></td> </tr> <tr> <td style="text-align: center;"><i>9</i></td> <td><i>(B) very good</i></td> <td style="text-align: center;"><i>85 - 94</i></td> </tr> <tr> <td style="text-align: center;"><i>8</i></td> <td><i>(C) good</i></td> <td style="text-align: center;"><i>75 - 84</i></td> </tr> <tr> <td style="text-align: center;"><i>7</i></td> <td></td> <td></td> </tr> <tr> <td></td> <td><i>(D) satisfactory</i></td> <td style="text-align: center;"><i>66 - 74</i></td> </tr> <tr> <td style="text-align: center;"><i>6</i></td> <td><i>(E) sufficient</i></td> <td style="text-align: center;"><i>55 - 64</i></td> </tr> <tr> <td style="text-align: center;"><i>5</i></td> <td><i>(F, FX) insufficient</i></td> <td></td> </tr> <tr> <td style="text-align: center;"><i>55</i></td> <td></td> <td></td> </tr> </tbody> </table>		<i>Points</i>		<i>Attendance</i>	<i>5</i>	<i>3</i>	<i>Participation on lectures</i>	<i>5</i>	<i>3</i>	<i>Tests</i>	<i>40</i>	<i>22</i>	<i>Seminar paper</i>	<i>10</i>	<i>5</i>	<i>Final exam</i>	<i>40</i>	<i>22</i>	<i>TOTAL</i>	<i>100</i>	<i>55</i>	<i>Grade</i>	<i>ECTS grade</i>	<i>Points scale</i>	<i>10</i>	<i>(A) excellent</i>	<i>95 - 100</i>	<i>9</i>	<i>(B) very good</i>	<i>85 - 94</i>	<i>8</i>	<i>(C) good</i>	<i>75 - 84</i>	<i>7</i>				<i>(D) satisfactory</i>	<i>66 - 74</i>	<i>6</i>	<i>(E) sufficient</i>	<i>55 - 64</i>	<i>5</i>	<i>(F, FX) insufficient</i>		<i>55</i>		
	<i>Points</i>																																																
<i>Attendance</i>	<i>5</i>	<i>3</i>																																															
<i>Participation on lectures</i>	<i>5</i>	<i>3</i>																																															
<i>Tests</i>	<i>40</i>	<i>22</i>																																															
<i>Seminar paper</i>	<i>10</i>	<i>5</i>																																															
<i>Final exam</i>	<i>40</i>	<i>22</i>																																															
<i>TOTAL</i>	<i>100</i>	<i>55</i>																																															
<i>Grade</i>	<i>ECTS grade</i>	<i>Points scale</i>																																															
<i>10</i>	<i>(A) excellent</i>	<i>95 - 100</i>																																															
<i>9</i>	<i>(B) very good</i>	<i>85 - 94</i>																																															
<i>8</i>	<i>(C) good</i>	<i>75 - 84</i>																																															
<i>7</i>																																																	
	<i>(D) satisfactory</i>	<i>66 - 74</i>																																															
<i>6</i>	<i>(E) sufficient</i>	<i>55 - 64</i>																																															
<i>5</i>	<i>(F, FX) insufficient</i>																																																
<i>55</i>																																																	
<b>Literature<sup>2</sup>:</b>	<p><b>Mandatory:</b></p> <ul style="list-style-type: none"> <li>• <i>Crnogorac, Č., Spahić, M. 2012: Osnovi geoekologije. Banja Luka: Artprint</i></li> <li>• <i>Labudović, B. (2002.) Obnovljivi izvori energije. Zagreb: Energetika marketing</i></li> </ul>																																																

<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

<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.



- *Natural resources - sustainable targets, technologies, lifestyles and governance, 2015. (ur. Ludwig, C., Matasci, C., Edelmann, X.). Dostupno na:  
<https://www.wrforum.org/wpcontent/uploads/2015/11/WRF-2013-2014-NaturalResources.pdf>*

**Recommended:**

- *Donlagić, M. 2005: Energija i okolina. Tuzla: Univerzitet u Tuzli.*
- *Natural resources: Definitions, trade patterns and globalization, World Trade Report, 2010. Dostupno na:  
[https://www.wto.org/English/res\\_e/booksp\\_e/anrep\\_e/wtr10-2b\\_e.pdf](https://www.wto.org/English/res_e/booksp_e/anrep_e/wtr10-2b_e.pdf)*
- *Energetska strategija Evropske unije. Dostupno na:  
<https://ec.europa.eu/energy/en/topics/energystrategy/2050-energy-strategy>.*