



UNIVERSITY OF SARAJEVO – FACULTY OF SCIENCE
SUBJECT DESCRIPTION

Form SP2

Page 1 of 3

Subject code: <i>GE-407-3</i>	Subject name: Methodology of geoecology research		
Study cycle: <i>I</i>	Year: <i>IV</i>	Semester: <i>VII</i>	ECTS credits: <i>5</i>
Status: <i>Mandatory</i>		Contact hours: <i>125</i> <i>Lectures: 30</i> <i>Exercises: 30</i>	
Assigned professors and assistants:			
Prerequisites:	/		
Subject objectives:	<ul style="list-style-type: none"> - Knowledge of geography and geoecology scientific methods - Understanding methodology concept in the field of geoecology - Knowledge of fundamental and applicative research in the field of geoecology - Applicative skills of using geoecology methods - Knowledge of collecting data, their representation and interpretation 		
Teaching units:	<ol style="list-style-type: none"> 1. Introduction: Scientific approach to geography and geoecology 2. Fundamental research- concept 3. Scientific communication 4. Collecting data in geography and geoecology- review 5. Physical-geographic measurements 6. Behavioral observations and archiving 7. Explicit reports: survey, interview, and tests 8. TEST 1 9. Experimental and non-experimental research design- models 10. Sampling 11. Statistical analysis of data 12. Methods of laboratory work: air, water, soil; plants and animals 13. Reliability and relevance 14. Informatics technologies 15. TEST 2 		
Learning outcomes:	<p>Knowledge: <i>Knowledge of scientific research methods in geography and geoecology. The concept of methodology. The nature of fundamental and applied research in geoecology. Methods of data collection, processing and presentation.</i></p> <p>Skills: <i>Identification of models, methods and parameters relevant to geoecological research. Identification, assessment and</i></p>		



	<p><i>categorization of geoeological parameters. Application of scientific research methods in the field of geoeology.</i></p> <p>Competencies: <i>Knowledge of modern models, techniques and methods in environmental protection. Identification and evaluation of geoeological parameters. Distinction of fundamental and applied geoeological research. Componental observations and assessment of the environmental condition.</i></p>																																													
Teaching methods:	<i>Interactive method, dialogue method, verbal interpretation, practical work, text method, audio-visual method, method of demonstration, method of written and graphic works, individual work, work in pairs and groups</i>																																													
Knowledge testing methods with grading structure¹:	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"></th> <th style="text-align: right;">Points</th> </tr> </thead> <tbody> <tr> <td colspan="2"><i>Attendance</i></td> <td style="text-align: right;">5</td> </tr> <tr> <td colspan="2"><i>Participation on lectures</i></td> <td style="text-align: right;">5</td> </tr> <tr> <td colspan="2"><i>Test 1,2</i></td> <td style="text-align: right;">40, 22; 80, 44</td> </tr> <tr> <td colspan="2"><i>Seminar paper</i></td> <td style="text-align: right;">10</td> </tr> <tr> <td colspan="2">TOTAL</td> <td style="text-align: right;">100</td> </tr> </tbody> </table> <p>Assessment:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><i>Grade</i></th> <th style="text-align: left;"><i>ECTS grade</i></th> <th style="text-align: left;"><i>Points scale</i></th> </tr> </thead> <tbody> <tr> <td>10</td> <td><i>(A) excellent</i></td> <td>95 - 100</td> </tr> <tr> <td>9</td> <td><i>(B) very good</i></td> <td>85 - 94</td> </tr> <tr> <td>8</td> <td><i>(C) good</i></td> <td>75 - 84</td> </tr> <tr> <td>7</td> <td></td> <td></td> </tr> <tr> <td></td> <td><i>(D) satisfactory</i></td> <td>66 - 74</td> </tr> <tr> <td>6</td> <td><i>(E) sufficient</i></td> <td>55 - 64</td> </tr> <tr> <td>5</td> <td><i>(F, FX) insufficient</i></td> <td></td> </tr> <tr> <td>55</td> <td></td> <td></td> </tr> </tbody> </table>			Points	<i>Attendance</i>		5	<i>Participation on lectures</i>		5	<i>Test 1,2</i>		40, 22; 80, 44	<i>Seminar paper</i>		10	TOTAL		100	<i>Grade</i>	<i>ECTS grade</i>	<i>Points scale</i>	10	<i>(A) excellent</i>	95 - 100	9	<i>(B) very good</i>	85 - 94	8	<i>(C) good</i>	75 - 84	7				<i>(D) satisfactory</i>	66 - 74	6	<i>(E) sufficient</i>	55 - 64	5	<i>(F, FX) insufficient</i>		55		
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Literature²:	<p>Mandatory:</p> <ol style="list-style-type: none"> <i>1. Montello, D.R., Sutton, P.C. (2013): "Scientific Research Methods in Geography and Environmental Studies", SAGE, Los Angeles</i> <i>2. Ninković, M. (2014): "Istraživanje životne sredine primenom GIS tehnologija i njenih internet servisa". Sinteza, Međunarodna naučna konferencija Univerziteta Singidunum, Beograd</i> 																																													

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

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.



3. Pešić, V., Tomović, Lj. (2010): "Praktikum iz ekologije". Univerzitet Crne Gore, Podgorica
4. Spahić, M. (1999): "Osnove geoekologije- geografske osnove životne sredine". Harfograf, Tuzla
5. Zelenika, R. (2000): "Metodologija i tehnologija izrade znanstvenog i stručnog djela". Ekonomski fakultet u Rijeci, Rijeka
6. Wu, J. (2013): "Landscape Ecology". Arizona State University, USA
7. Ashley, P., Boyd, W.E. (2006): "Quantitative and qualitative approaches to research in environmental management". Australasian Journal of Environmental Management, vol. 13, no. 2, Australia and New Zeland
8. Crnogorac, Č., Spahić, M. (2012): "Osnovi geoekologije". Artprint, Banja Luka
9. Mihajlov, A.N. (2009): "Osnove analitičkih instrumenata u oblasti životne sredine". Ministarstvo za nauku i tehnološki razvoj Srbije, Beograd
10. Žunić, L. (2022): Pozitivni socio-kulturni impakti turizma na geografsku i životnu sredinu, PMF Sarajevo