



Subject code: GIS-301.5-2		Subject name: GIS Practicum	
Study cycle: I	Year: III	Semester: VI	ECTS credits: 6
Status: elective		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:		The main objectives of the course are: • To familiarize students with the content and structure of the digital atlas of Bosnia and Herzegovina. • To educate students on editing existing and creating new thematic sets of spatial data from the digital atlas of Bosnia and Herzegovina. • To introduce students to the use of various analog and digital data sources for enhancing the content of the digital atlas of Bosnia and Herzegovina. • To inform students about the use of thematic sets from digital databases in the digital atlas of Bosnia and Herzegovina for creating regional and spatial plans at different planning levels.	
Teaching units:		1. Digital Thematic Data Sets: Concept, definitions, and significance. Methodological organization concept and types of digital thematic data sets. Importance of digital thematic data sets for regional and spatial planning. 2. Digital Atlas of Bosnia and Herzegovina: Concept, origin, and development. 3. Methodological Organization Concept and Structure of the Digital Atlas of Bosnia and Herzegovina: Significance and application in regional and spatial planning. 4. Geological-Geomorphological Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 5. Climatic-Hydrological Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 6. Pedological-Biogeographical Database of Bosnia	



	and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 7. Natural and Cultural-Historical Heritage Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 8. Demogeographical Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 9. Database of Settlements in Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 10. Transportation-Geographical Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 11. Economic-Geographical Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 12. Geoecological Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 13. Tourism Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 14. Regional and Historical-Geographical Database of Bosnia and Herzegovina: Methodological organization concept and structure. Practical individual work on data entry and editing. 15. Synthesis of Practical Individual Work on Data Entry and Editing.
Learning outcomes:	Knowledge: – The student explains the possibilities of using various analog and digital data sources for enhancing the content of the digital atlas of Bosnia and Herzegovina. – The student classifies and actively participates in extracting and transforming different analog and digital data.



Skills:

- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the geological-geomorphological database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the climatic-hydrological database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the pedological-biogeographical database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the natural and cultural-historical heritage database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the demogeographical database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the database of settlements in Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the transportation-geographical database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the economic-geographical database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the geoecological database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and graphically presents the methodological organization concept and structure of the tourism database of Bosnia and Herzegovina.
- The student inputs, classifies, organizes, edits, and



	graphically presents the methodological organization concept and structure of the regional and historical-geographical database of Bosnia and Herzegovina. Competencies: – The student evaluates, assesses, combines, and ranks sets of digital databases from the digital atlas of Bosnia and Herzegovina. – The student demonstrates the possibilities of using thematic sets of digital databases from the digital atlas of Bosnia and Herzegovina in creating regional and spatial plans at different planning levels.																																										
Teaching methods:	– Multimedia presentations and discussions (lectures). – Independent research work by students. – Joint analysis and practical work by students in relevant application software (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>Engagement in Class (Synthesis of Practical Individual Work):</td><td>10</td><td>6</td></tr><tr><td>Final exam</td><td>85</td><td>46</td></tr><tr><td colspan="3"> </td></tr><tr><td>TOTAL</td><td>100</td><td>55</td></tr></table> Assessment: <table><tr><td><i>Grade</i></td><td><i>ECTS grade</i></td><td><i>Points scale</i></td></tr><tr><td>10</td><td>(A) excellent</td><td>95 - 100</td></tr><tr><td>9</td><td>(B) very good</td><td>85 - 94</td></tr><tr><td>8</td><td>(C) good</td><td>75 - 84</td></tr><tr><td>7</td><td>(D) satisfactory</td><td>66 - 74</td></tr><tr><td>6</td><td>(E) sufficient</td><td>55 - 64</td></tr><tr><td colspan="3"> </td></tr><tr><td>5</td><td>(F, FX) insufficient</td><td>55</td></tr></table>		<i>Maximum points</i>	<i>Minimum points</i>	Attendance	5	3	Engagement in Class (Synthesis of Practical Individual Work):	10	6	Final exam	85	46				TOTAL	100	55	<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
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Literature²:	Mandatory: 1. Đug S., Drešković, N., Odžak, S. (2015): Daljinska istraživanja, principi i primjena u prirodnim naukama. Univerzitetski udžbenik. Univerzitet u Sarajevu. Sarajevo 2. Heywod, I., Cornelius, S. And Carver, S.(1998): An																																										

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.



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Introduction to Geographical Information Systems. Pearson Education Inc. New York.

3. Walford, N. (1995): Geographical Data Analysis. School of Geography, Kingston University UK,

Recommended:

1. Malone, L., Palmer A.M., i Voigt, C.L. (2003): Mapping Our World, GIS Lessons for Educators. ESRI Press, Redlands, California, USA.