DETAILED PROPOSAL OF THE STUDY PROGRAMME

1.GENERAL INFORMATION ON THE STUDY PROGRAMME				
1.1. Name of the study programme	**Undergraduate University Study in Geography; course: research**			
1.2. Provider(s) of the study programme	University of Zagreb, Faculty of Science, Dept. of Geography			
1.3. Type of study programme	Vocational study programme ☐		University study programme ☒	
1.4. Level of study programme	Undergraduate ☒	Graduate ☐	Integrated ☐	Postgraduate specialist ☐
1.5. Manner of implementation o the study programme	Classical ☒	Mixed (Classical + *on line*) ☐	*On line* in entirety ☐	
1.6. Academic/vocational title earned at completion of study	University Baccalaureate (baccalaureus/baccalaurea) in Geography			

2. INTRODUCTION	
2.1. Reasons for starting the study programme	On the basis of official approval in 2005, the Dept. of Geography of the Faculty of Science of the University of Zagreb has been conducting an Undergraduate Research Study of Geography programme since the 2005/2006 academic year. Through the process of self-evaluation of teaching and on the basis of the procedure that stems from the quality management system of the University of Zagreb (university student questionnaires, evaluation of study as a whole, questionnaires on study completion) a need has been identified for changes and augmentation of the study programme with the objective of improving the outcome competences needed on the labour market and in further education. The changes were made with the approval of the Faculty Council, the Quality Management Board and the Senate of the University of Zagreb. In the age of globalisation, on the threshold of the post-industrial society, information is becoming one of the key resources of development. Today, almost all information has its spatial dimension. We consider it unnecessary separately to make out a well-argumented case related to the importance of space as one of the fundamental developmental resources of Croatia. Therefore, the Dept. of Geography of the Faculty of Science in Zagreb has implemented Undergraduate Research Study of Geography to date. The study programme orientated in that way corresponds with the contemporary development of Geography as a scientific discipline.
2.2. Assessment of the study programme's usefulness relative to the demand on the labour market in the public and private sectors	In our estimation, because of the inadequate education system to date, many occupations connected with spatial organisation and management do not exist on the Croatian labour market or are being filled by specialists from other professions. The experience of European Union states shows that issues related to spatial and regional development are an interdisciplinary area in which Geography, particularly Applied Geography, have a pivotal role. That relates especially to public and private activities linked with the spatial aspects of social spatial planning and design development, regional development, environmental protection, cartography, tourism, geopolitics, security and defence, water resource management, and the like. Apart from that, complex geographic knowledge and skills are

	necessary in publishing, journalism and information science (particularly familiarity with the geographical GIS Information System). This study programme will offer adequate knowledge and capabilities in carrying out the activities mentioned. Working practice during the 6 semesters in a total duration of one week is also seen as part of the proposed study programme. Working practice encompasses familiarisation with work in the institutions and companies that are engaged in work of interest to geographers, representing a potential basis for employment of geographers.
2.3. Compatibility of the study programme with the University mission and the strategy of the Proposer, as well as with the strategy statement of the network of higher education institutions.	The proposed programme is compatible with the Development Strategy of the University of Zagreb (the 2001 ISKORAK initiative), the Research Strategy of the University of Zagreb 2008-2013, the Act of Higher Education, the Bologna Declaration, the Strategic Development Plan of the Dept. of Geography of 2008 and other documents connected with science and higher education.
2.4. Comparability of the study programme with the other accredited programmes in higher education institutions in the Republic of Croatia and EU countries (name two programmes at most of which one is from an EU country, and compare it with the proposed programme /provide internet addresses of the programmes)	In its structure and competences on completion, the proposed programme is comparable with the following programmes: -Single-subject Undergraduate University Study in Applied Geography, University of Zadar, Dept. of Geography, http://www.unizd.hr/geografija/Studijskiprogrami/tabid/422/Default.aspx - First Level University Study Programme in Geography – single subject: University of Ljubljana, Faculty of Philosophy, Dept. of Geography, http://geo.ff.uni-lj.si/1-stopnja-geografija
2.5. Openness of the study programme to student mobility (horizontal, vertical in the Republic of Croatia and internationally)	The proposed programme enables the mobility of students during their studies at the proposal and under the supervision of the coordinator and the application of the ECTS grading scale We would like to emphasise that the Faculty of Science has to date prompted and enabled the mobility of its students. In 1992, the Faculty of Science achieved *de facto* equalisation of the Graduate level in Undergraduate study until then with the Master's level in study at various European and non-European countries. On the basis of its own experience (1988), the Faculty of Science accepted the role in 1999 of the pilot-project institution for the University project for introducing ECTS grades, and introduced the ECTS grading scale in all its departments. The Faculty of Science was one of the first faculties to introduce the Supplemental Diploma (1988) and the Appendix (1999) according to ERASMUS. In accordance with that, it has achieved mobility in its Geography programmes to date, primarily of non-Croatian students and lecturers. In the entire Faculty of Science, the Dept. of Geography leads the way in the mobility of its

	students going abroad and students coming from abroad. As part of the ERASMUS and CEEPUS projects, an average of some ten students come to the Department, while some fifteen students from the Department of Geography leave for other universities at the same time. In the first phase, we shall encourage the mobility of students and lecturers from higher education institutions, with which institutional co-operation already exists: • the Dept. of Geography, University of Zadar • the Dept. of Geography of the Faculty of Philosophy, University of Ljubljana • the Faculty of Philosophy, University of Maribor • the Faculty of Science and Education Sciences, University of Mostar, Bosnia-Herzegovina • Eotvos Lorand University, Budapest (Hungary) • the Hungarian Academy of Science, Budapest, Hungary • the Institute of Karst Research, Postojna (Slovenia) • the Leibniz Institute of Geography, Leipzig (Germany) • Forschungsslelle für Wirtschaftsgeographie und Raumordnungspolitik FWR-HSG, University of St Gallen, Switzerland • the Institute of Geography, Bulgarian Academy of Science, Sofia (Bulgaria) On completion of Undergraduate study, the majority of students enrol in the Graduate Study programme at the Dept. of Geography and at other Faculty of Science departments. The Dept. of Geography also successfully achieves the mobility of its lecturers and associates with the objective of carrying out research and continuous advanced learning, the exchange of experiences and the preparation of new projects. Each year, at least two University lecturers from abroad participate in lecturing at the Dept of Geography.
2.6. Relationship with the local community (economy, entrepreneurship, civil society, etc.)	The connection of the study programme with the local community stems from the character of geographical science which, with its all-encompassing research into local community environment issues, has great potential for improving the functioning of that same community. The relationship with the local community is demonstrated in the education of specialists who, with their work and social activity after completion of the programme, will contribute to an improvement in the general quality of life of all its citizens. In addition, This is also achieved through working practice at institutions and companies and during the conduct of field teaching.
2.7. Compatibility with requirements of professional organisations	The proposed programme has been coordinated with the Statue of the Croatian Geographical Society (www.hagede.hr) – the umbrella society of geographers in Croatia.
2.8. Name possible partners outside the higher education system that have expressed interest in the study programme	Possible partners that have shown interest or could possibly be interested in the Undergraduate Research Study of Geography are:

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	Public sector • scientific institutions • State agencies for education (AZOO, ASOO, NCVVO) • State administration bodies and local government and self-government entities • spatial planning and design institutes • Statistical Bureaux (city, county and State) • public Nature protection institutions (national parks and nature parks) • cultural and historical heritage protection institutes • cadastral offices, cartographic and geo-information institutions • lexicography and publishing • tourism organisations (e.g. city/municipal, county and State tourist communities) • public spatial and economic management companies (Croatian Water, Croatian Forests, Croatian Roads…) • the Croatian Army • the media Private sector • private planning companies • cartographic and geo-information companies • lexicography and publishing • tourism organisations and agencies • the media
2.9. Other (as the Proposer wishes to add)	The Dept of Geography of the Faculty of Science is proud of its long tradition at the Faculty, where it has been developing since its foundation. In that, particular emphasis is placed on its bridging role between natural sciences and the social sciences. The proposal of the new study programme at the Dept. of Geography has been adapted to that role.

3. OPĆI DIO	
3.1. Scientific/artistic area of the study programme	The interdisciplinary area of science, the field of Geography
3.2. Duration of the study programme (is there an option of distance learning, part-time studying, etc.)	- 3 years - there is no possibility of distance-learning, part-time study and the like
3.3. The minimum number of ECTS required for	180

completion of study	
3.4. Enrolment requirements and admission procedure	Completed four-year secondary school having passed the mandatory State Matriculation exams (Croatian Language, a foreign language, Mathematics) and the electoral State Matriculation subjects (mandatory passing of Geography). Candidates are ranked in the differentiation process by NISpVU according to a) secondary school results…, b) the State Matriculation exams passed (Croatian Language, Mathematics, a foreign of classical language, Geography, History, Biology or Chemistry or Physics), and c) the candidate's additional achievements (results achieved in State competitions during secondary school education, results achieved in County competitions during secondary school education).
3.5. Learning outcomes of the study programme /name 15 to 30 learning outcomes)	**Specialist knowledge, capability and skills:** Familiarity and understanding of: Geographical terminology, definitions and theory Application of the methodology of contemporary geographical research Appropriate statistical and graphical methods Cartographic methodology, interpretation of the elements and content of geographic maps Theoretical bases of geo-informatics, particularly the GIS geographical information systems. Basics of structural and exogenous geomorphology. Geographical distribution and role of water resources Climatic elements, factors and types Natural geographical element and factors, their inter-relation within the geo-ecosystem at various spatial levels The meaning of population in the process and functioning of spatial organisation Urban and rural spatial systems, their mutual relations and structural and functional features Economic geographical systems and models, their structures, dynamics and developmental factors at various spatial levels Developmental factors, the features of individual types of traffic, traffic networks, the dynamics of traffic flows, cause-and-effect connection between traffic and other economic activities Political and geographical factors, particularly globalisation and integration processes Geographical aspects of social and cultural processes Cause-and-effect connections between elements and factors of the natural base and social superstructure. The region concept and the regionalisation principle Contemporary geographical features of Croatia, Europe and world The concept of regional and long-term sustainable development

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	Cognitive capabilities and skills: Application of knowledge in establishing, defining and solving issues of medium complexity Capability of interpreting and discussing relevant and actual geographic phenomena and processes Skills required for evaluation, interpretation and synthesis of information and data Skills in presentation of scientific content and argumentation, both written and oral **Practical capabilities and skills:** Spatial orientation with the aid of the contemporary technology and skills necessary for field work Mapping geographical content, geo-referencing Application of statistical and graphical methods in the analysis and presentation of research results Use of maps, cartographic and geo-visualisation methods in analysis and presentation of research results Application of GIS-technique in the solution of assignments of medium complexity **Generic capabilities and skills:** Solving assignments linked with qualitative and quantitative geographic information Independent perusal of literature and sources. Information-technological skills: use of word processing programmes and tabular calculations, collection and storing of data, use of the Internet Efficacious work, independently and as a member of a team Independent work necessary for professional advancement
3.6. Employment possibilities (list of potential employers) and opinion of three organisations associated with the labour market on the adequacy of anticipated learning outcomes (attach)	On completion of the Undergraduate Research Study programme, undergraduates in Geography can be employed in jobs that relate to documentation, information and communications for example in archives (cartographic and other material), State organisations and NGOs, tourism offices, tour operators, in market research, in political parties, in publishing, journalism, the media and the like. The undergraduate in Geography is qualified for jobs in collecting and processing spatial data in scientific institutions, spatial planning institutions, in cartographic institutions and companies and in the bodies of State and local administration.
3.7. Possibilities of continuing studies at a higher level	At the Dept. of Geography of the Faculty of Science: Graduate University Study of Geography in the following courses: Physical Geography with Geo-ecology, Spatial planning and Regional Development, Cultural Heritage and Tourism, Geographical Information Systems. Graduate University Study of Geography – Education. Undergraduates in Geography can also enrol in the enrolment competitions for other graduate study courses in both Croatia and

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	abroad.
3.8. If submitting proposals for graduate studies, name undergraduate studies of the Proposer or other institutions that qualify for admission to the proposed graduate study	

4. DESCRIPTION OF THE STUDY PROGRAMME				
4.1. List of mandatory and elective curses and/or modules with class hours and ECTS credits (Appendix: Table 1)				
4.2. Description of each course (Appendix 2)				
4.3. Structure of the study (number of semesters, trimesters, class size for lectures, seminars, exercises)	- 6 semesters - group size: lectures 40, exercises 30, seminars 20 students			
4.4. Requirements for enrolment in successive semesters or trimesters	For enrolment in all courses in the following years it is necessary to have passed all the exams for the previous year. If the student has failed to pass all the prescribed courses from a particular year of study, he/she may enrol once again in the failed subjects in the following year and his/her ECTS scale grades shall then be calculated as being emcumbered [with an outstanding obligation], meaning tht he/she can enrol in courses from the higher year of study (under the condition that he/she has passed the prescribed preceding subjects), up until the fulfilment of the outstanding encumbrance of up to a total of 35 ECTS scale grades per semester. For enrolment in the subequent subject whose preceding subject, according to the programme, is part of the semester that immediately precedes it, it shall be necessary merely again to attend the preceding subject lectures, and to pass it prior to the subsequent one.			
4.5. List of courses and/or modules that the student can take in other study programmes	There is no possibility of taking a course from other study programmes, apart from doing so as an extra-curricula course.			
4.6. List of courses and/or modules offered in a foreign language as well /name which language)	No courses are offered in a foreign language.			
4.7. Completion of study:				
a) Final requirement for completion of study	Final thesis ☒	Diploma thesis ☐	Final exam ☒	Diploma exam ☐
b) Requirements for final/diploma thesis or final/diploma/exam	The final exam is enrolled in during the last semester of study under the title “Final Examination and Undergraduate Thesis” as the student’s final obligation and encumbrance within the permissible quota of 35 ECTSs at the most per semester. Those students who have passed all the exams, fulfilled all the prescribed obligations and submitted their Undergraduate Thesis for evaluation by the prescribed term may sit for the final exam.			
c) Procedure of evaluation of final/diploma exam and evaluation and defence of final/diploma	The procedure starts with the application of the undergraduate thesis topic using the prescribed form available on the			

thesis	website of the Department and at the Office of the Department of Geography. The student is required to register the application of the undergraduate thesis topic co-signed by the mentor at the Office for Students and submit it to the assistant to the head of the department for teaching, programmes, and students. At the first session of the Council of the Department of Geography the received topics are considered for adoption. The list of accepted and rejected topics is published on the notice board of the Department of Geography. The main purpose of the undergraduate thesis is to demonstrate the student's ability to apply theoretical and practical knowledge acquired during their studies, and the ability to independently search out and use domestic and foreign literature in the written handling of the topic. Furthermore, by writing the undergraduate thesis the student successfully demonstrates his or her professional paper writing skills. The student should write the undergraduate thesis in the form of a thorough seminar thesis of about 25 pages. The undergraduate thesis is written as a word document in A4 format, Times New Roman 12-point font, with 1.5 spacing. Mandatory elements of the thesis are: The title page, a table of contents, an introduction, the body of the topic, a conclusion, and a list of sources and references. Pages are numbered in Arabic numerals starting from the introduction. The introduction should summarize the subject and the purpose, as well as the geographic scope of the work. The body of the topic is the central and most comprehensive part of the work. It can be divided into several chapters. Relevant facts related to the topic are described, explained and presented in a logical order. The writing style should be concise, clear and linguistically correct. If necessary, it is the duty of the mentor to recommend language proofreading. Particular attention should be paid to citation and the proper making and labelling of tabular, graphic and cartographic additions, and in stating the sources of data that were used to make them. Hereby, the instructions to authors published in Hrvatski geografski glasnik (Croatian Geographical Bulletin) should be followed. Graphics should be rich in content and complete. Each table and diagram should be legible out of context, and numbered. In theses the same data can be displayed both in tables and graphics form. Taking (copying, scanning) of complete graphical and tabular displays of other authors should be avoided as much as possible. The conclusion is a concise synthesis of the undergraduate thesis outlining the most important findings and facts in relation to the selected issues. The list of references and sources should contain only those references and sources which the candidate has read or used. If, as an exception, it is important to specify bibliographic data for a work that is not directly used, the source from which the reference is taken should be given. The form of literature citation should match that accepted by Hrvatski geografski glasnik (Croatian Geographical Bulletin), according to the notes for contributors. Prior to final submission of the undergraduate thesis for evaluation to the teacher-mentor, the student may request a revision of the printed work by the teacher-mentor, no later than 20 days before the date of the final examination. The teacher is required to perform the revision within 7 days and give his or her suggestions and remarks. In the event that the teacher-mentor cannot, for justified reasons, perform the revision, another teacher will do it in consultation with the mentor. Undergraduate theses can be submitted for assessment without revision, if the student so desires, in which

	case the grade given is final. Theses can be submitted for assessment at any time from the date of the acceptance of the topic to no later than 10 days before the date of the final examination (20 days if revision is requested). After 20 days before the date of the final examination (and no later than 10 days before the date of the final exam) have expired, all theses received for assessment are considered to be final. Undergraduate theses must be submitted for evaluation spiral bound, and the mentor enters the final grade in the space provided on the front page of the thesis, the application form, index and ISVU system no later than five days after the thesis had been given in. The mentor gives one evaluated copy of the undergraduate thesis in print and digital form to the Office for Students.

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Table 1. List of required and elective courses and/or modules with class hours and ECTS credits

LIST OF COURSES/MODULES								
Year of study: 1st								
Semester: winter								
MODULE	COURSE	COURSE TEACHER	L	S	E	e-learning	ECTS	Required/ elective
	Introduction to Geography	S. Šterc	2	0	0	0	4	R
	Statistical and Graphical Methods in Geography	K. Bašić	2	0	2	0	5	R
	Cartography	A. Toskić	2	0	2	0	7	R
	Climatology	A. Filipčić	3	0	2	0	7	R
	Hydrogeography	D. Orešić	3	0	2	0	7	R
	Physical Training 1	K. Fučkar Reichel, J. Vulić	0	0	2	0		R

LIST OF COURSES/MODULES								
Year of study: 1st								
Semester: summer								
MODULE	COURSE	COURSE TEACHER	L	S	E	e-learning	ECTS	Required/ elective
	Statistical and Graphical Methods in Geography	K. Bašić	2	0	2	0	5	R
	Cartography	A. Toskić	2	0	2	0	5	R
	Geology	A. Moro, Đ. Pezelj, D. Kurtanjek	2	0	2	0	5	R
	Population Geography	S. Šterc	3	2	0	0	6	R
	Marine Geography	D. Orešić	3	0	0	0	5	R
	Physical Training 2	K. Fučkar Reichel, J. Vulić	0	0	2	0		R
	Field work I (60 h/year)	Course teacher according to decision of Department of Geography Council					4	R

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LIST OF COURSES/MODULES								
Year of study: 2nd								
Semester: winter								
MODULE	COURSE	COURSE TEACHER	L	S	E	e-learning	ECTS	Required/ elective
	Economic Geography	M. Jakovčić	3	2	0	0	6	R
	Urban Geography	D. Njegač, V. Prelogović	3	2	0	0	6	R
	Rural Geography	D. Pejnović	3	2	0	0	6	R
	Industrial Geography	Z. Stiperski	2	2	0	0	5	R
	Tourism Geography	Z. Curić	3	1	0	0	4	R
	Physical Training 3	K. Fučkar Reichel, J. Vulić	0	0	2	0		R
	ELECTIVE COURSE 1						3	R
	Geographic Aspect of Globalization	Z. Stiperski	2	1	0	0	3	E
	Geography of Southeast Europe	D. Pejnović	3	0	0	0	3	E
	Geography of East Asia	D. Njegač	2	1	0	0	3	E
	Geography of Anglo-America	L. Šakaja	2	1	0	0	3	E
	Geography of Latin America	S. Faivre	2	1	0	0	3	E
	Geography of Australia and Oceania	A. Filipčić	2	1	0	0	3	E

LIST OF COURSES/MODULES								
Year of study: 2nd								
Semester: summer								
MODULE	COURSE	COURSE TEACHER	L	S	E	e-learning	ECTS	Required/ elective
	Geomorphology	S. Faivre	3	0	2	0	6	R
	Transportation Geography	M. Jakovčić	2	2	0	0	5	R
	Cultural Geography	L. Šakaja	2	2	0	0	5	R
	Geography of Europe	V. Prelogović	3	1	0	0	4	R
	Political Geography	Z. Stiperski	2	1	0	0	3	R
	Physical Training 4	K. Fučkar Reichel, J. Vulić	0	0	2	0		R
	Field work II (60 h/year)	Course teacher according to decision					4	R

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		of Department of Geography Council						
	ELECTIVE COURSE 2						3	R
	Mineralogy and Petrology	D. Kurtanjek	2	0	1	0	3	E
	Regional Climatology	A. Filipčić	2	1	0	0	3	E
	Urban systems of the world	D. Njegač	2	1	0	0	3	E
	Mediterranean	B. Fuerst-Bjeliš	2	1	0	0	3	E
	Geography of Russia	L. Šakaja	2	1	0	0	3	E
	Geography of Asia	Z. Stiperski	2	1	0	0	3	E
	Introduction to Japanese Studies	Z. Stiperski	2	1	0	0	3	E
	Geography of Africa	R. Vuk	2	1	0	0	3	E
	Geography of Less Developed Countries	V. Prelogović	2	1	0	0	3	E

LIST OF COURSES/MODULES

Year of study: 3rd

Semester: winter

MODULE	COURSE	COURSE TEACHER	L	S	E	e-learning	ECTS	Required/ elective
	Geoinformatics	A. Toskić	2	0	2	0	6	R
	Historical Geography	I. Zupanc	2	2	0	0	6	R
	Geoecology and Environment protection	N. Buzjak	2	2	0	0	6	R
	Regionalization principles	B. Fuerst-Bjeliš	2	2	0	0	6	R
	ELECTIVE COURSE 3						3	R
	ELECTIVE COURSE 4						3	R
	Geographic Aspect of Globalization	Z. Stiperski	2	1	0	0	3	E
	Geography of Southeast Europe	D. Pejnović	3	0	0	0	3	E
	Geography of East Asia	D. Njegač	2	1	0	0	3	E
	Geography of Anglo-America	L. Šakaja	2	1	0	0	3	E
	Geography of Latin America	S. Faivre	2	1	0	0	3	E
	Geography of Australia and Oceania	A. Filipčić	2	1	0	0	3	E

LIST OF COURSES/MODULES

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Year of study: 3rd

Semester: summer

MODULE	COURSE	COURSE TEACHER	L	S	E	e-learning	ECTS	Required/ elective
	Geoinformatics	A. Toskić	2	0	2	0	6	R
	Geography of Croatia	D. Njegač	3	2	0	0	5	R
	Geographical theoretical approach	S. Šterc	1	1	0	0	3	R
	Field work III (60 h/year)	Course teacher according to decision of Department of Geography Council					4	R
	Practical work (40 h/year)						2	R
	Final Examination and Undergraduate Thesis	Student has an option to select a mentor					4	R
	ELECTIVE COURSE 5						3	R
	ELECTIVE COURSE 6						3	R
	Mineralogy and Petrology	D. Kurtanjek	2	0	1	0	3	E
	Regional Climatology	A. Filipčić	2	1	0	0	3	E
	Urban systems of the world	D. Njegač	2	1	0	0	3	E
	Mediterranean	B. Fuerst-Bjeliš	2	1	0	0	3	E
	Geography of Russia	L. Šakaja	2	1	0	0	3	E
	Geography of Asia	Z. Stiperski	2	1	0	0	3	E
	Introduction to Japanese Studies	Z. Stiperski	2	1	0	0	3	E
	Geography of Africa	R. Vuk	2	1	0	0	3	E
	Geography of Less Developed Countries	V. Prelogović	2	1	0	0	3	E

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REQUIRED COURSES

Table 2. Course description

1. GENERAL INFORMATION			
1.1. Course teacher	Stjepan Šterc	1.6. Year of the study programme	1st
1.2. Name of the course	**Introduction to Geography**	1.7. Credits (ECTS)	4
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+0+0 (2+0+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Introduce students with the geographical identity through the concept of inner and outer research subject-matter and its recognition. Insight students with the position of geography within scientific and educational system. Introduce students with professional and study programmes and its organization. Enable students for geographical fact, generalization and knowledge identification, implementation and inquiry in geographical space. Explain students the specificities of geographical methodology in research process. Introduce students with the historical development of geography. Introduce students with the nominal (discipline) and branch division of geography and its links with other research areas. Qualify students to write seminars and professional papers. Develop the ability of geographical context, process, relationship and link recognition. Train students for spatial law definition. Develop among students geographical approach of objective spatial reality comprehension.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge, abilities and skills: consideration, understanding and cognition of:** Geographical theoretical and methodological concept and system.		

	Laws which exist in geographical space. Logics and functional spatial organization on the surface of Earth. Common and special methodological approaches. Geographical space structure as the basal for all planning within it. Spatial processes, relationships, links and models. Strategic meaning of geographical space and its spatial laws. Natural ground as primary conditionality on the surface on Earth. Social (civilizational) structures in the spatial organization function. Order of conditionality in space. Corelation of natural ground and social superstructure in geographical space. Materialization of fundamental relation. Common and regional spatial organization concept. Strategic meaning of geographical scientific approach. **Cognitive abilities and skills**: Spatial law spotting and definition. Spatial disproportion understanding and explaining. Interpretation, discussion and annotation of relevant geographical spatial processes, relationships, links and models. **Practical abilities and skills:** Understanding of spatial logics. Geographical process, relationship and link mapping. **Operational abilities and skills:** Individual searching and database selection. The research task suggestion.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	**Knowledge, abilities and skills: consideration, understanding and cognition of:** Geographical theoretical and methodological concept and system. Geographical space structure as the basal for all planning within it. Spatial processes, relationships, links and models. Strategic meaning of geographical space Natural ground as primary conditionality on the surface od Earth.

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	Social (civilizational) structures in the spatial organization function. Common and regional spatial organization concept. Strategic meaning of geographical scientific approach. **Cognitive abilities and skills**: Spatial law spotting and definition. Spatial disproportion understanding and explaining. Interpretation, discussion and annotation of relevant geographical spatial processes, relationships, links and models. **Practical abilities and skills:** Understanding of spatial logics. Geographical process, relationship and link mapping. **Operational abilities and skills:** Individual searching and database selection. The research task suggestion.		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Basic geographical terminology and categories. 2. Geographical theoretical-methodological concept. 3. Outher and inner research subjecter matter of geography. 4. Research methods and techniques. 5. Geography within scientific, educational and social system. 6. Geographical organizational and study forms. 7. Historical development of geography in the World. 8. Historical development of geography in Croatia. 9. Concept of contemporary development of geography in Croatia. 10. Meaning of geography in spatial, regional, economical and social development of Croatia. 11. Research database overview. 12. Geographical analyses and popular and professional paper writing. 13. Field reserch and spatial reality understanding. 14. Geographical identity. 15. Affirmation of geography.		
2.6. Format of instruction:	X lectures	X independent assignments	2.7. Comments:

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	☐ seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning x field work		☐ multimedia and the internet ☐ laboratory X work with mentor ☐ (other)		This course aims to introduce students with geographical approach, development of geography and its contemporary concept in Croatia.	
2.8. Student responsibilities	Regular class attendance, passed preliminary exam, reserach discussion and independent research construction.					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	1	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay		(other)	
	Tests	1	Oral exam	1	(other)	
	Written exam	1	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Class attendance and discussion in research groups, tests, written and oral exam.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Vresk, M., 1997: *Uvod u geografiju Razvoj, struktura,metodologija. Školska knjiga, Zagreb.*	10	yes
	Holt-Jensen, A., 2009: *Geography. History and Concepts*. *A Student's Guide*, SAGE Publications, London.	2	yes
	Šterc, S., 1986: O suvremenom geografskom objektu istraživanja s posebnim osvrtom na demogeografiju, *Geografski glasnik* 48, 99-121.	10	yes
	Getis, A., Getis, J., Fellmann, J. D., 2008: *Introduction to Geography,*McGraw-Hill International Edition, London.	2	yes

2.12. Optional literature (at the time of submission of study programme proposal)	Bonnett, A., 2009: *What is Geography?,*SAGE, London.
2.13. Quality assurance methods that ensure the acquisition of exit competences	Among classical ways of student evaluation, independent research works with mentors instruction have been especially evaluated and revolted on the level of potential student involvement in scientific and professional meetings.
2.14. Other (as the proposer wishes to add)	Research tasks have been assigned by students individual choice.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Ksenija Bašić	1.6. Year of the study programme	1st
1.2. Name of the course	**Statistical and Graphical Methods in Geography**	1.7. Credits (ECTS)	5+5
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+30+0 (2+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Knowledge of the basic statistical and graphical methods, that should enable the students to use scientific literarure, to learn specific methods of particular geographic disciplines, to work statistical data for their description and analysis, to make conclusions on the features of the analyzed phenomena, to plan scientific research.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills** Knowledge and understanding of appropriate statistics and graphic techniques. **Cognitive abilities and skills:** The skills needed for evaluation, interpretation and synthesis of relevant information. **Practical abilities and skills:** Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:**		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Conducting literature research and use databases and other sources of information.
Functioning effectively as an individual and as a team member.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">Understanding the role of statistical and graphical methods in geographic research.
Knowledge of the systematization of graphical methods and the basic rules of their presentation.
Ability to gather information to form data sets. Tables and graphical presentation of data sets.
Knowledge and application of the indicators of distribution of frequencies.
Knowledge and application of the model of linear regression.
Knowledge of the types of thematic maps and their application in geography.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1 Objectives, contents and learning outcomes of the course; concept an the plan of work; evaluation of the students achievements.
2 The notion of statistics. Basic definitions.
3-4 Systematization of graphical methods and the basic rules of their presentation.
5-8 Formation of data sets. Tables and graphical presentation of data sets.
9 Relative numbers.
10-12 Measures of central tendency.
13-15 Measures of variability.
16-17 The Lorenz curve.
18-19 Simple linear regression. Correlation.
20 Linear trend.
21 Introduction to the sample method.
22-24 Thematic maps.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular class attendance, 10 exercises, 4 colloquiums.</td></tr>
<tr><td rowspan="4">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>Exercises</td><td>1</td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>4</td><td>Oral exam</td><td>2</td><td>(other)</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

credits is equal to the ECTS value of the course)	Written exam	3	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	Evaluation of exercises and colloquiums, written and oral examination.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Šošić, I., Serdar, V., 2002: *Uvod u statistiku*, Školska knjiga, Zagreb.	10	yes
	Šošić, I., 2006: *Primijenjena statistika*. Školska knjiga, Zagreb.	10	yes
	Papić, M., 2014: *Primijenjena statistika u MS Excelu*. Zoro, Zagreb.	10	yes
	Šterc, S., 1990: *Grafičke metode u nastavi*. Školska knjiga, Zagreb.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Petz, B., 2007: *Osnovne statističke metode za nematematičare*. Slap, Jastrebarsko. Šošić, I., 1998: *Zbirka zadataka iz statistike*. Mikrorad, Ekonomski fakultet, Zagreb.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Aleksandar Toskić	1.6. Year of the study programme	1st
1.2. Name of the course	**Cartography**	1.7. Credits (ECTS)	7
1.3. Associate teachers	Dubravka Spevec	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+30+0 (2+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Knowledge of the basic features of maps and acquaintance with applied knowledge about the elements of cartography and maps, as well as of the knowledge about map making and use.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Applying of methodology in geography and current investigations in its field. Methods in cartography, interpretation of elements and contents of geographical maps. **Cognitive abilities and skills:** The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Orientation in space with modern technologies and other skills needed in fieldwork. Mapping of geographic data, georeferencing. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Generic abilities and skills:
Problem solving, relating to qualitative and quantitative geographic information.
Functioning effectively as an individual and as a team member.
Continuous professional development.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">- to explain the relation between cartography and geography according to their relation to maps
- to explain mathematical elements and positioning on the Earth
- to distinguish characteristics of real and virtual maps,
- to know basics of cartographic projections and applying them properly in map making
- to know processes of cartographic generalization and their proper applying in map making</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Cartography – definition and classification.
2. Cartography and geography – development and relation towards maps.
3. Map as model of spatial reality
4. Map classification. Real and virtual maps
5. Map and map elements
6. The shape and dimensions of the Earth.
7. Defining positions on the Earth. Orientation on the horizon.
8. Geographic coordinates.
9. Global navigational satellite systems
10. Absolute and relative heights
11. Map scale
12. Cartographic generalization
13. Cartographic projections – term and classification
14. Problem of projection selection
15. Gauss-Kruger’s projection.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attendance to lectures and exercises.</td></tr>
<tr><td>2.9. Screening student work (name the</td><td>Class attendance</td><td>0,3</td><td>Research</td><td></td><td>Practical training</td><td>2</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work		Report		(other)	
	Essay		Seminar essay		(other)	
	Tests	4,7	Oral exam		(other)	
	Written exam		Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Observation of class attendance and making exercises. The final grade is made on the basis of tests.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Robinson, A. H., Morrison, J. L., Muehrcke, P. C., Kimerling, J., Guptill, S. C., 1995: *Elements of Cartography*, John Wiley & Sons, New York.	2	yes
	MacEachren, Alan M., 1995: H*ow Maps Work. Representation, Visualization and Design*, The Guilford Press, New York.	1	yes
	Kraak, M., Ormeling, F., 2003: *Cartography: Visualization of Geospatial Data*, Prentice Hall, Harlow.	1	yes
	Toskić, A., 2008: *Kartografija, Internal materials for students,* Faculty of Science, Department of Geography, Zagreb.	10	yes

2.12. Optional literature (at the time of submission of study programme proposal)	
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Anita Filipčić	1.6. Year of the study programme	1st
1.2. Name of the course	**Climatology**	1.7. Credits (ECTS)	7
1.3. Associate teachers	Mladen Maradin	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+0+30+0 (3+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The main learning objective is capability for geographical interpretation of climatological research resultats. Making use of climatic factors and their influence on the climatic elements students are supposed to be able to explain the causes of differences between the different climates as well as their intensity and consequences. Beside students are informed about basic graphical and statistical methods in climatology as well as the searching the literature.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	Developing of cognitive, practical and generic abilities and skills: knowing and understanding interactions between climate, relief and waters, knowing and understanding interactions between natural and social landscape components, getting professional competencies from core science, developing competencies for research work.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowing and understanding geosystgem interactions. Knowing and understanding interactions between climate and human activities. Knowing and understanding the basic climatic elements and their distribution on the Earth. Understanding and interpretation of causes of climatic differences on the Earth. Understanding and coordinating climate features and human activities. Understanding and applying the climate elements effect on the spatial planning. Knowing and understanding regional climatic differences in Croatia.		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. The content of climatology. Weather and climate. Climatology and geography. The climatic elements and factors. 2. Atmosphere. Chemical composition of the atmosphere. The vertical structure of the atmosphere. 3. The energy balance. Radiation.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">4. The air temperature. The termal features of land mass and the sea. Geographical distribution of air temperature.
5. Motion in the atmosphere. The air pressure. The air masses and climatic fronts. The geographical distribution of the winds.
6. Moisture in the atmosphere. The water vapour. Fog, clouds and cloudness.
7. The geographical distribution of precipitation. Drought and desertification problems.
8. The circulation of the atmosphere. The types of circulation. Local and regional air circulation.
9. Mid-latitude circulation. The air disturbances and thunderstorms.
10. The general air circulation. The geographical importance of the monsoon circulation.
11. The global climate system. The climate classification. Climatic indices. Climate classification afater Koeppen.
12. The climate change. Climate fluctuation and climate variation. The climate change in the instrumental period. Historical and holocen climate change. The wuerm climate.
13. The climate of kenozoic glaciation. The climate in the geological time. The causes of climate change.
14. The anthropogenic influences related to climate.
15. The climate of Croatia.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">☐ independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Class attendance, short term exams, exercises done.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0.50</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>4.00</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>2.50</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Attendance to class, exercises, short term written exams, oral exam. The final grading depends on oral exam and written short exams.</td></tr>
<tr><td rowspan="3">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Šegota, T., Filipčić, A., 1996: Klimatologija za geografe. Udžbenici Sveučilišta u Zagrebu. Školska knjiga, Zagreb.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.12. Optional literature (at the time of submission of study programme proposal)	Oliver, J. E. (ed.), 2008: *Encyclopedia of world climatology*. Springer, Dordrecht.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Danijel Orešić	1.6. Year of the study programme	1st
1.2. Name of the course	**Hydrogeography**	1.7. Credits (ECTS)	7
1.3. Associate teachers	Ivan Čanjevac	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+0+30+0 (3+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring fundamental knowledge of water and its geoecologic role, of hydrosphere and its waters, especially of rivers, catchments and discharge regimes. Knowledge of Croatian hydrogeography, Understanding water resources and their role in modern societies.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. Geographical distribution and usage of water resources. Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. Causality relations between the elements and factors of natural environment and society. Concept of regional and sustainable development. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form.		

	Practical abilities and skills: Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowing and understanding hydrogeographic terminology, definitions and theories. Understanding water as an element in physical geography. Knowing the characteristics and genesis of different land waters appearance forms. Knowing and understanding fundamental causal relations between waters and societies. Knowing and determining elements of rivers and basins; basics of calculating river basin water balance. Knowing Croatian hydrogeography. Knowledge and ability to interpret and discuss the need for water resources conservation and awareness about water as a strategic good in 21st century. Ability of independent acquiring, compiling and interpreting of basic hydrologic data. Applying river regime classification according to Parde. Skills and abilities to produce water stage and discharge graphs. Skills and abilities of fieldwork discharge measuring.
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 The position and role of hydrogeography. 2 Porperties of water and its geoecologic role. 3 and 4 Genesis of Earth's athmosphere, hydrologic cycle and hydrosphere. 5 and 6 Distribution of waters on Earth, water balance on Earth, availability of drinking water. 7 Ground water. 8 Ice and snow. 9 Lakes and wetlands. 10 Rivers 11 Cathment (basin) and its elements.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">12 River regimes, classification accoriding to Parde.
13 and 14 Croatian hydrogeography
15 Water as a strategic good in 21st century, conflicts and agreements about the usage of water reosurces.

exercises:
1 Data sources in hydrology and hydrogeography.
2 Water stage data measuring and interpetation, producing water-level graphs.
3 and 4 River discharge data, simple and proffesional measuring, data interpretation, stage - discharge relationship.
5 Producing and interpeting hydrographs.
6 and 7 River measuring and calculating river elements.
8 River network, working on orohydrographic maps.
9 and 10 Stream ordering, classifications (Gravelius, Horton, Strahler, Pfaffstetter).
11 Water balance in a river basin; calculating precipitation amounts.
12 Waters in Croatia, working with maps.
13 Water consuption in Croatia, spatial and temporal variations.
14 and 15 Fieldwork.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attendance to class, completed exercises.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,7</td><td>Research</td><td></td><td>Practical training</td><td>0,7</td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>2,1</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>3,5</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Written evaluation, oral examination.
Attendance to class 10 % + exercises 10 % + written examination 50 % + oral examination 30 %</td></tr>
<tr><td>2.11. Required literature (available in the library and via other media)</td><td colspan="4">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Riđanović, J., 1993: *Hidrogeografija*. II. izdanje. Školska knjiga, Zagreb, 215 str.	20	yes
	Mayer, D., 2004: *Voda: od nastanka do upotrebe*. Prosvjeta, Zagreb.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Shiklomanov, I. A i J. C. Rodda (urednici), 2003.: *World Water resources at the Beginning of the 21st Century*. International Hydrology Series, Cambridge Univ.Press, Cambridge, 435 str. Plut, D., 2000: *Geografija vodnih virov*. Filozofska fakulteta, Oddelek za geografijo, Ljubljana, 281 str. Articles in relevant scientific journals and on Internet.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Aleksandar Toskić	1.6. Year of the study programme	1st
1.2. Name of the course	**Cartography**	1.7. Credits (ECTS)	5
1.3. Associate teachers	Dubravka Spevec	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+30+0 (2+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1

2. COUSE DESCRIPTION	
2.1. Course objectives	Knowledge of the basic features of maps and acquaintance with applied knowledge about the elements of cartography and maps, as well as of the knowledge about map making and use.
2.2. Course enrolment requirements and entry competences required for the course	-
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Applying of methodology in geography and current investigations in its field. Methods in cartography, interpretation of elements and contents of geographical maps. **Cognitive abilities and skills:** The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Orientation in space with modern technologies and other skills needed in fieldwork. Mapping of geographic data, georeferencing. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:**

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Problem solving, relating to qualitative and quantitative geographic information.
Functioning effectively as an individual and as a team member.
Continuous professional development.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">- to know featires of electronic atlases, web maps and map like products
- to know and apply basic rules of map design (map planning and composition)
- to apply (independently) the method of geographic contents mapping in field work
- to use maps properly in research and presentation of research results
- to know thematic mapping methods and rules for proper thematic method selection in thematic map making</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Relief presentation.
2. Cartographic symbols.
3. Methods of spatial data collection for map making
4. Toponyms and cartographic transcription.
5. Topographic maps.
6. Presentation of former Croatia’s topographic maps.
7. Current topographic maps of Croatia.
8. Thematic maps.
9. Thematic mapping methods.
10. Thematic maps and GIS
11. Computer assisted cartography
12. Web maps. Map-like presentations.
13. Atlases. Digital atlases.
14. History of cartography.
15. Map use.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td><td></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attendance to lectures and exercises.</td></tr>
<tr><td rowspan="3">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of</td><td>Class attendance</td><td>0,3</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

ECTS credits is equal to the ECTS value of the course)	Tests	1,7	Oral exam	1,3	(other)	
	Written exam	1,7	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Observation of class attendance and making exercises. The final grade is made on the basis of test, written exam and oral exam results.					

	Title	**Number of copies in the library**	**Availability via other media**
2.11. Required literature (available in the library and via other media)	Robinson, A. H., Morrison, J. L., Muehrcke, P. C., Kimerling, A. J., Guptill, S. C., 1995: *Elements of Cartography*, John Wiley & Sons, New York.	2	yes
	MacEachren, Alan M., 1995: *How Maps Work. Representation, Visualization and Design*, The Guilford Press, New York.	1	yes
	Kraak, M., Ormeling, F., 2003: *Cartography: Visualization of Geospatial Data*, Prentice Hall, Harlow.	1	yes
	Toskić, A., 2008: *Kartografija*, in-house course materials, Faculty of Science, Department of Geography.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)			
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Alan Moro, Đurđica Pezelj, Dražen Kurtanjek	1.6. Year of the study programme	1st
1.2. Name of the course	**Geology**	1.7. Credits (ECTS)	5
1.3. Associate teachers	Duje Kukoč	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+30+0 (2+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Learn the basic concepts and principles of mineralogy and petrology. Obtaining information about origin, properties and use of minerals and rocks. Developing skills (on the field and in the laboratory) of determination of minerals and rocks. Obtaining knowledge, skills and abilities to observe, analyse and interpret the facts related to geology, and use of these informations in the undrestanding different geological processes and phenomena. Introduce students with morphological characteristics, paleoecological requirements and evolutionary trends of various fossil groups . fossils as indicators of geological time and past environments. position of continents and climate change throughout geologic time.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** Geological terminology, definitions and theories. Applying of methodology in geology and current investigations in its field. **Cognitive, practical and generic abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geological problems and processes. Orientation in space with modern technologies and other skills needed in fieldwork. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Internet. Functioning effectively as an individual and as a team member. Continuous professional development.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Students should be capable to: explain and describe internal order in crystals as well as crystal morphology; define and determine chemical and physical properties of minerals (identify and systematize); distinguish the main rock types and varieties inside of each group and explain their origin, describe the Earth's layers, explain the structure elements of the lithosphere, understand ground waters, recognize and explain the principal geological processes related to continets, seas and oceans, understand plate tectonics.Students will be able to incorporate fossil data in order to interpret and reconstruct depositional environment, including climate change throughout geologic time.		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	- Definiton of mineral and mineralogy; internal order in crystals, crystallization, crystal habit; crystal sistems; symmetry elements - Chemical properties of minerals (composition, isomorphism, polimorphism); mineraloids; physical properties of minerals (hardness, tenacity, specific gravity, cleavage, fracture, color luster, thermal, electrical and magnetic properties), systematization of minerals - Igneous rocks (Earth's interior; origin and composition of magma; texture and structure,compositon and classification) - Sedimentary rocks (sedimentary cycle - weathering; erosin, transportation, deposition, lithifaction; texture and structure; composition and classification) - Metamorphic rocks (factors controlling the metamorphic processes - pressure, temperature, chemically active fluids; types of metamorphism; composition and classification) -Tectonic elements of the lithosphere (folds, faults) - Ground waters, porosity, springs, rivers, water in karst terrains - Lakes and swamps, deltas, estuaries, ocean basins, transgression and regression, glaciers - Wind, geological role of organisms, sedimentation, earthquakes - Tectonic plates, mountain belts - Fossils, how does an organism become a fossil, their importance in biostratigraphic zonations and paleoecology. geological time scale - Precambrian and lower palaeozoic era – the most important fossils and geological events. - Middle and upper palaeozoic era - the most important fossils and geological events. - Mesozoic era - the most important fossils and geological events. - Cnozoic era - the most important fossils and geological events.		
2.6. Format of instruction:	X lectures	X independent assignments	2.7. Comments:

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	☐ seminars and workshops X exercises ☐ on line in entirety ☐ partial e-learning ☐ field work		☐ multimedia and the internet ☐ laboratory ☐ work with mentor ☐ (other)			
2.8. Student responsibilities	Regular attendance; mid-exams, independent assignments					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance		Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay		(other)	
	Tests	2	Oral exam		(other)	
	Written exam	3	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	The grade at the final exam is defined on regularity of attendance to courses and practical, on evaluation of the colloquium and written exam.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Vrkljan, M., 2012: *Uvod u mineralogiju i petrologiju.* RGNF, Zagreb.	5	yes
	D. Bucković: *Historijska geologija 1 i 2* (http://gfz.hr/~buckovic/) - e book		yes
2.12. Optional literature (at the time of submission of study programme proposal)	Thompson, G. R. & Turk, J., 2007: *Earth Science and the Environment*. Harcout Brace College Publishers, Orlando. Press, F., Sieer, R., Grotzinger, J., Jordan, T. H., 2003: *Understanding Earth*. W.H. Freeman and Company, New York. Prothero, D. R., 2003: *Bringing fossils to life. An introduction to paleobiology*. WCB/ McGraw - Hill, New York.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	- university polls of students - self-evaluation of teaching: updating and revising the objectives and contents of the course and updating and revising of teaching and learning strategy - exit polls: evaluation of graduate study - Interview with companies, institutions and institutes where students perform their practical work - polls ater first year of employment (monitoring of employments ater graduation)		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Stjepan Šterc	1.6. Year of the study programme	1st
1.2. Name of the course	**Population Geography**	1.7. Credits (ECTS)	6
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	45+30+0+0 (3+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Introduce students with the population geography identity through the concept of geographical research subject-matter. Insight students with the position of population geography within geographical system. Introduce students with the meaning of population in geographical space. Enable students for population geography fact, generalization and knowledge identification, implementation and inquiry in geographical space. Explain students the specificities of geographical approach towards population acting in space. Introduce students with the historical development of population geography. Introduce students with the nominal (discipline) and branch division of geography and its links towards population geography. Qualify students to write research papers. Develop the ability of relation recognition between population and other contents in geographical space. Train students for spatial law definition conditioned by the population acting. Develop the appliance of projections and spatial models in population development.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge, abilities and skills: consideration, understanding and cognition of:** Geographical theoretical and methodological concept and system.		

	Laws which exist in geographical space. Logics and functional spatial organization on the surface of Earth. Common and special methodological approaches. Geographical space structure as the basal for all planning within it. Spatial processes, relationships, links and models. Strategic meaning of geographical space and its spatial laws. Natural ground as primary conditionality on the surface od Earth. Social (civilizational) structures in the spatial organization function. Order of conditionality in space. Corelation of natural ground and social superstructure in geographical space. Materialization of fundamental relation. Common and regional spatial organization concept. Strategic meaning of geographical scientific approach. Functional and sustainable spatial organization. Model projectioning. **Cognitive abilities and skills**: Spatial law spotting and definition. Spatial disproportion understanding and explaining. Interpretation, discussion and annotation of relevant geographical spatial processes, relationships, links and models. **Practical abilities and skills:** Understanding of spatial logics. Geographical process, relationship and link mapping. **Operational abilities and skills:** Individual searching and database selection. The research task suggestion. Construction of research case study.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	**Knowledge, abilities and skills: consideration, understanding and cognition of:** Theoretical and methodological concept and population geography system. Logics and population functional organization on the surface of Earth.

	Methodological system in population inquiries. Strategic meaning of population in the geographical space Corelation of natural ground, social superstructure and population in geographical space. Demographic space structure as the basal for all planning. Spatial demographic processes, relationships, links and models. Social (civilizational) structures in the spatial organization function. Common and regional spatial organization concept. **Cognitive abilities and skills**: Spatial law spotting and definition. Spatial disproportion understanding and explaining. Interpretation, discussion and annotation of relevant geographical spatial processes, relationships, links and models. **Practical abilities and skills:** Understanding of spatial logics. Drmographic process, relationship and link mapping. **Operational abilities and skills:** Individual searching and database selection. The research task suggestion.
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Theoretical concept of population geography. 2. Scientific divisions and approaches. Position of population geography within scientific system. 3. The meaning of population for spatial and entire development. 4. Population as strategic resource and potential. 5. Population Census. 6. Distribution of world's and Croatian's population. 7. Population movement. 8. Natural population movement. 9. General population movement. 10. Migrations. 11. Basic demographical processes.Population growth, depopulation, natural increase and decrease, dying out, population supstitution... 12. Demographical structures.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">13. Population projections.
14. Spatial population modelling.
15. Population and regional development.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
X work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:
This course aims to introduce students with demographical approach, development of population geography and its contemporary concept in Croatia.</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular class attendance, passed preliminary exam, reserach discussion and independent research construction.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>1</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>2</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>2</td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>1</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Class attendance and discussion in research groups, tests, seminar essay and written exam.</td></tr>
<tr><td rowspan="6">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Nejašmić, I., 2005: Demogeografija:Stanovništvo u prostornim odnosima i procesima, Školska knjiga, Zagreb.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3">Wertheimer-Baletić, A., 1999: Stanovništvo i razvoj, MATE d.o.o., Zagreb.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3">Friganović, M.,A., 1978: Demogeografija. Stanovništvo svijeta, Školska knjiga, Zagreb.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3">Šterc, S., 1986. O suvremenom geografskom objektu istraživanja s posebnim osvrtom na demogeografiju, Geografski glasnik 48, 99-121.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td>2.12. Optional literature (at the time of submission of study programme</td><td colspan="6">Gary, P., Larkin, R., 2008: Population Geography: Problems, Concepts, and Prospects, Ninth Edition, Kendall/ Hunt Publishing Company, Dubuque.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

proposal)	Weinstein, J., Pillai, V. K.,2001: *Demography. The Science of Population,* Allyn and Bacon, Boston.
2.13. Quality assurance methods that ensure the acquisition of exit competences	Among classical ways of student evaluation, independent research works with mentors instruction have been especially evaluated and revolted on the level of potential student involvement in scientific and professional meetings.
2.14. Other (as the proposer wishes to add)	Research tasks have been assigned by students individual choice.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Danijel Orešić	1.6. Year of the study programme	1st
1.2. Name of the course	**Marine Geography**	1.7. Credits (ECTS)	5
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+0+0+0 (3+0+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring fundamental knowledge about world ocean and its geographic significance. In physical geography emphasis is on main oceanographic properties and their influence in global and regional geography. In human geography the goal is to understand its significance in historic geography as well as in modern world transportation, economics and geopolitics.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Geographic terminology, definitions and theories. Geographical distribution and usage of water resources. Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. Factors of development and characteristics of transportation modes, transportation networks, dynamics of transportation flows, impacts of relationship of transport and other economic activities. Processes in political geography, with emphasis on globalisation and integration processes. Causality relations between the elements and factors of natural environment and society. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form.		

	Practical abilities and skills: Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowing the geographic distribution of oceans and seas. Understanding ocean properties and their geoecologic role. Understanding eustatic and regional sea level changes. Knowing surface and deep-sea ocean current systems. Understanding geographic influences of sea currents. Understanding the genesis and influences of sea waves and tides. Understanding primary organic production in world ocean. Knowing maritime political and economic regimes; elements of international maritime law. Skills in using charts. Ability to discuss oceans historic geography role and modern socioeconomic role. Ability to discuss the need of ocean conservation. Conducting literature research in the field of marine geography.
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 Marine geography and marine sciences. 2 Geographic distribution of oceans and seas. Sea level changes. 3 Geomorphology of ocean basins. 4 Chemical composition of sea water, geographic and internal distribution of salinity. 5 Geographic and internal distribution of sea water temperature. Relation between temperature, salinity and density of the sea water. Sea ice. 6 Atmosphere – ocean interactions. Horizontal oceanic circulations. 7 Vertical oceanic circulation. 8 ENSO.

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<table>
<tr><td></td><td colspan="6">9 Waves.
10 Tides.
11 Matter and energy ocean circulation. Marine organisms' distribution. Primary organic production in oceans.
12 Physical geography properties of coasts, types of coasts, estuaries nod deltas.
13 Oceans and seas in socioeconomic development. Fishing and mariculture. Off-shore ore extraction. Energy from the ocean.
14 Oceans in world trading. Litoralization.
15 Elements of international maritime law.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
☐ seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attendance to class.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>2,0</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>2,5</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Written evaluation, oral examination.
Attendance to class 10 % + written examination 50 % + oral examination 40 %</td></tr>
<tr><td rowspan="5">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Riđanović, J., 1993: Hidrogeografija. II. izdanje. Školska knjiga, Zagreb, 215 str.</td><td>20</td><td>yes</td></tr>
<tr><td colspan="3">Thurman, H. V. i Burton, E. A., 2003: Introductory oceanography. 10th edition. Prentice Hall, New Jersey, 624 str.</td><td>3</td><td>yes</td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td>2.12. Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Sverdrup, K., 2009: Introduction to the World's Oceans. 10th edit. McGraw-Hill, New York etc., 521 str.
Riđanović, J., 2002: Geografija mora. Hrvatski zemljopis, Bibliotheka Geographia Croatica, Zagreb, 214 str.
Bonačić, D., 2014: Osnove oceanografije. Vlastita naklada autora, Split, 69 str.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Articles in relevant scientific journals and on internet.
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Martina Jakovčić	1.6. Year of the study programme	2nd
1.2. Name of the course	**Economic geography**	1.7. Credits (ECTS)	6
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	45+30+0+0 (3+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	General aim of the course is to gain knowledge about position and role of economic geography in the context of geographic science. Course studies concepts, theoretic approach, and main models in economic geography and their application in geographic research. Emphasis is put on the importance of energy sources, trends in consumption, geographic consequences of their spatial distribution and problems of sustainability of consumption. Through explanation f factors which influence development of economic activities students will be able to understand and explain processes and problems in contemporary world. Students will gain basic knowledge that should use them as a basis for understanding specialist courses.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	Systems and models in economic geography, their structure, dynamics and development factors on various spatial levels. Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. Ability to explain and discuss relevant and actual geographic problems and processes. Mapping of geographic contents. Continuous professional development. Conducting literature research and use databases and other sources of information.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowledge of geographical terms, basic definitions, concepts, basic theoretic approaches and models in economic and geographic research. Apply methodology of economic geography in geographic research. Explain problems of energy usage in contemporary world (types, spatial distribution, trends in consumption, sustainability of energy sources.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Extract elements and types of spatial systems at various spatial levels.
Differ and explain spatial systems of certain economic activities.
Explain dynamics and diversity of processes of transition at global and regional level.
Apply relevant methods and actions in collection, processing and interpretation of spatial data.
Apply knowledge in determination, and resolving spatial problems of medium complexity.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Definition of economic geography, traditional and contemporary concepts, aim of the research and methods
2. Theoretic approaches and models
3. Energy – energy sources, spatial distribution, trends in consumption, sustainability part I.
4. Energy – energy sources, spatial distribution, trends in consumption, sustainability part I
5. Economic systems
6. General indicators of economic development
7. Spatial systems of primary economic sector, factors of development of agriculture, types of agricultural production
8. Spatial systems of secondary activities
9. Spatial systems of tertiary activities
10. Factors of development, dynamics and structure of world retail
11. Structure of retail in .S and Western Europe
12. Structure of retail in developing countries
13. Term and the model of transition o retail
14. Retail in cities
15. Baking, monetary and fiscal systems</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular attending of lecture and seminars. Active participation in lectures. Preparation of seminar essay. Application of cartographic methods in field research (o organization and conduction of mapping). Oral and written report on the results of field work.</td></tr>
<tr><td rowspan="4">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the</td><td>Class attendance</td><td>0,6</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>1,8</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

course)	Written exam	3,6	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	Notes on attendance of lectures, seminars and mapping and noting student activities. Final mark will be a result of a written exam and seminar essay.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Aoyama, Y. et al., 2011: *Key concepts in Economic Geography*, Sage Publications, Los Angeles.	1	yes
	Coe, N. M. i dr., 2007: *Economic geography, contemporary introduction*, Blackwell, Malden – chapters 1 and 3.	1	yes
	Hudson, R., 2005: *Economic geographies*, Sage publications, London – chapters 8, 9 and 10.	1	yes
	Krugman, P. R., Obstfeld, M., 2009: *Međunarodna ekonomija*. Teorija i ekonomska politika, Mate, Zagreb – chapters 14, 20, 21 and 22.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Optional literature will be determined according to students preferences.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	Procedures outlined in *Regulations and Handbook on the Quality Assurance* at the University of Zagreb and the Faculty of Science: - university and faculty student survey - teaching self-evaluation: modernizing and reassessment of course's goals and content, and strategy of teaching and learning; evaluation of learning outcomes by analysis of students level of success according to Student Office data and self-records - outgoing survey: undergraduate university study evaluation - interview with companies, institutions and institutes where students perform their practical work		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dražen Njegač, Vedran Prelogović	1.6. Year of the study programme	2nd
1.2. Name of the course	**Urban geography**	1.7. Credits (ECTS)	6
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+30+0+0 (3+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Knowledge of the cities, their meaning in societies, processes in cities and urban regions, city impact on global development. Students have to be able to apply theoretical models and appropriate statistic and cartographic methods in the identification of intensity and meaning of phenomena and processes in the cities and urban regions.		
2.2. Course enrolment requirements and entry competences required for the course	Attended classes of Population Geography.		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Urban geographic terminology, definitions and theories. Urban spatial systems, their structural and functional characteristics. Causality relations between the elements and factors of natural environment and society. Applying of methodology in geography and current investigations in its field. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual urban geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Skills needed in fieldwork.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Mapping of urban geographic data. Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results.. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative urban geographic information. Conducting literature research and use databases and other sources of information. Functioning effectively as an individual and as a team member. Continuous professional development.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-to explain the notions of city, urbanization, nodal region -to indentify and compare stages of urbanization in Croatia and in the world -to analyze city functions on selected examples -to analyze spatial and functional structure as well as the social topography of the cities -to apply the methodology of urban geography in the analysis of local, national and global urban systems and the city influence on its surroundings -to evaluate the city influence on the transfomation of its surroundings -to explain the central place organization		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Geographic notion of the city, development of urban geography. 2. Forms of urbanization. 3. Urbanizations of the world and Croatia. 4. City functions. 5. Functional classification of the cities. 6. Spatial-functional structure of the city. 7. Urban social structure. 8. Social topography of the city. 9. City morphology. 10. City as a system. 11. City and surroundings - suburbanization. 12. City and surroundings - metropolitanization. 13. Nodal and urban systems. 14. Central place theory. 15. City and globalization.		
2.6. Format of instruction:	X lectures	X independent assignments	2.7. Comments:

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning ☐ field work		☐ multimedia and the internet ☐ laboratory X work with mentor ☐ (other)			
2.8. Student responsibilities	Regular class attendance, oral presentation of written essay, field work.					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,5	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay	1	(other)	
	Tests	1	Oral exam	2	(other)	
	Written exam	1,5	Project		(other)	

	Title	Number of copies in the library	Availability via other media
2.11. Required literature (available in the library and via other media)	Vresk, M., 2002: *Grad i urbanizacija – Osnove urbane geografije*, peto dopunjeno izdanje, Školska knjiga, Zagreb.	10	yes
	Pacione, M., 2009: *Urban Geography – a global perspective*, 3rd ed., Routledge.	3	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Hill, M., 2005: *Urban Settlement and Land Use*, Hodder Edcation. Kaplan, D., Wheeler, J., Holloway, S., 2009: *Urban Geography*, second edition, Wiley. Articles from the geographic journals (Hrvatski geografski glasnik/Croatian Geographical Bulletin, Acta Geographica Croatica...)		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dane Pejnović	1.6. Year of the study programme	2nd
1.2. Name of the course	**Rural Geography**	1.7. Credits (ECTS)	6
1.3. Associate teachers	Aleksandar Lukić	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+30+0+0 (3+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring knowledge on rural areas, the process of its transformation and the current problems of sustainable development. Understanding the structural and dynamic problems of rural areas, training for integrated planning of their development.		
2.2. Course enrolment requirements and entry competences required for the course	Passed an examination of population geography and rural geography course completed.		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. The role of population in processes and functional spatial organization. Urban and rural spatial systems, their interrelationships and the structural and functional characteristics. Globalization and integration processes. Causality relations between the elements and factors of natural environment and society. Modern geography of Croatia and Europe. Concept of regional and sustainable development. **Cognitive abilities and skills:** The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:**		

	Mapping of geographic data, georeferencing. Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowledge and understanding of terminology, definitions and theories of rural geography. Knowledge and understanding of the structure, functions and processes in rural areas. Ability to distinguish rural discourse, models and allocation criteria of rural areas. Knowing and understanding the causes of the problems of sustainable development of rural areas. Ability to analyze spatial processes, their causes and consequences in rural areas. The ability to synthesize information and data on the problems of rural areas. Application of statistical and graphical methods in the analysis and presentation of the content of rural geography. Literature review on rural areas. Understanding the causes of the problems and possibilities of development of rural areas in the world, Europe and Croatia.
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 Introduction 2 Scientific bases of rural geography 3 Characteristics of rural areas 4 Development of rural areas 5 Rural areas in the modernization and global processes: the transformation factors 6 Rural areas in the modernization and global processes: forms of transformation 7 Population and demographic processes in rural areas 8 Socio-geographic features in rural areas 9 Lifestyles and identity of rural areas 10 Typology of rural areas 11 Problems of sustainable development of rural areas 12 Planning for sustainable development of rural areas

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	13 Problems and models of sustainable development of rural areas: case studies (World) 14 Problems and models of sustainable development of rural areas: case studies (Europe) 15 Problems and models of sustainable development of rural areas: case studies (Croatia)						
2.6. Format of instruction:	X lectures X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning X field work		X independent assignments ☐ multimedia and the internet ☐ laboratory X work with mentor ☐ (other)		2.7. Comments:		
2.8. Student responsibilities	Regular class attendance, oral presentation of written essay, field work.						
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	1	Research		Practical training		
	Experimental work		Report		(other)		
	Essay		Seminar essay	1	(other)		
	Tests		Oral exam	2	(other)		
	Written exam	2	Project		(other)		
2.10. Grading and evaluating student work in class and at the final exam	The final score is determined by the total scores written and oral examinations and evaluation seminar.						

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Lukić, A., 2012: *Mozaik izvan grada: tipologija ruralnih i urbaniziranih naselja Hrvatske*, Meridijani, Samobor, 256 p.	15	yes
	Lukić, A., Pejnović, D., 2010: Metodološke osnove izrade tipologije ruralnih područja Hrvatske, *Zbornik znanstvenog skupa Ruralni prostori Jugoistočne Europe između lokalizacije i globalizacije* (ur. Snježana Musa), Geografsko društvo Hercegovine, Mostar, 95-121.	10	yes
	Pejnović, D., Lukić, A., 2010: Dinamički i strukturni problem ruralnih područja u tranzicijskim zemljama: primjer Hrvatske, *Zbornik znanstvenog skupa Ruralni prostori Jugoistočne Europe između lokalizacije i globalizacije* (ur. Snježana Musa), Geografsko društvo Hercegovine, Mostar, 73-93.	10	yes
	LEADER – od inicijative do metode: vodič za poduku o LEADER-ovu pristupu (ur. I. Laginja), ZOE – Centar za održivi razvoj ruralnih krajeva, Zagreb, 2004.	10	yes
2.12. Optional literature (at the time of	Woods, M., 2005: *Rural Geography: Processes, Responses and Experiences in Rural Restructuring*, University of Wales,		

submission of study programme proposal)	Aberystwyth. Robinson, M. G., 1990: *Conflict and change in the countryside, Rural society, economy and planning in the developed world*, Chichester. Hoggart, K., Buller, H., Black, R., 1995: *Rural Europe, Identy and Change*, London. Haan, de H., Kasimis, B., Redelift, M., 1997: *Sustainable Rural Development*, Aldershot. Butler, R., Hall C. M., Jenkins J. (ur.) 1998: *Tourism and Recreation Rural Areas*, John Wiley & Sons, Chicheste Articles in relevant scientific journals and on internet.
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Zoran Stiperski	1.6. Year of the study programme	2nd
1.2. Name of the course	**Industrial Geography**	1.7. Credits (ECTS)	5
1.3. Associate teachers	Jelena Lončar	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+30+0+0 (2+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Understanding the spatial processes in the world: process of industrialization, concept of industrial development, new economy concept, development stages of Croatian industry, regional innovation systems and knowledge-based regions.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	The course contributes to understanding spatial distribution and factors important for the industry. It also contibutes to understanding the impact of various processes which change industry and global society (industry based on knowledge and high technologies). The course contributes to development of professional competence in geography science, the development of competence for independent research and creating the foundation for continuing education.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-explain the process of industrialization -explain the emergence and development of the industry -explain the concept of industrial development in the concept of sustainable development -explore the social framework as a precondition for the development of industry -explore the position of industries and multinational industrial corporations in the globalized economy -get to know the terms: local economy, industrial clusters, techno parks, regions of knowledge -compare the development stages of Croatian industry		
2.5. Course content broken down in detail by weekly class schedule	1 Industrial geography: concept, different understandings of concept, the development of the discipline 2 The processes of industrialization		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td>(syllabus)</td><td colspan="6">3 Industry and the concept of sustainable development
4 Industry in the New Economy concept
5 Social changes made on the basis of changes in the industry
6 Introducing the concept of local economy and also defining position of industry in local economy
7 Position of industry in globalized world
8 Corporate geography
9 Transnational corporations
10 Industrial clusters
11 Techno and science parks, business incubators
12 Regional innovation systems and knowledge-based regions
13 Eco-industrial parks and "green" industry
14 Development stages of Croatian industry
15 Social framework in which develops Croatian industry</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attending classes and seminars regularly. Written seminar based on individually collected and analyzed literature.</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>1,5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>2</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>1</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td colspan="6"></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">The final grade is determined on the basis of the seminar evaluation, colloquium results, written and oral exams. All elements of evaluation except colloquium must be positive.</td></tr>
<tr><td rowspan="2">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Stiperski, Z., 2014: Internal course materials Industrial Geography, Faculty of Science, Department of Geografphy, Zagreb.</td><td>10</td><td>yes</td></tr>
</table>

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	Barnes, T. J., Gertler, M., 2002: *The New Industrial Geography*, Routledge.	1	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Beaverstock, J. V., Faulconbridge, J., Hall, S., 2012: *The globalization of executive search industry: Professional service strategy and dynamics in the contemporary world*, Routledge studies in international business and the world economy. Šiljković, Ž., 2011: *Industrijska geografija*, Sveučilište u Zadru, Zadar. Dicken, P., 2003: Global Shift, Reshaping the Global Economic Map in 21st century, The Guilford Press. Manfred M. Fisher, Peter Nijkamp (editor), *Handbook of Regional Science*, Springer Reference, Volumen 1-3, Berlin-Heidelberg, 2014.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	The procedures listed in the Rule Book and the Manual of Quality Management at the University of Zagreb and the Faculty of Science: - University and college student survey - Self-evaluation of teaching: updating and revising the aims and subjects of course; updating teaching and learning strategies; evaluation of learning outcomes by analyzing students performance based on the personal data and data of the Student Administration Office - Exit polls: evaluation of undergraduate study - Interview with companies, institutions and institutes where students perform their practical work		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Zoran Curić	1.6. Year of the study programme	2nd
1.2. Name of the course	**Tourism Geography**	1.7. Credits (ECTS)	4
1.3. Associate teachers	Vuk Tvrtko Opačić	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+15+0+0 (3+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COURSE DESCRIPTION			
2.1. Course objectives	To get the students acquainted with the tourism development factors, tourism's spatial distribution and tourism's consequences in an area.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	The course contributes to: - development of thinking skills and logical inference - development of skills on how to present professional and scientific contents - use of knowledge and solving of spatial problems - conception of tourism significance in the economy of the world and Croatia		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Having attended the course and passed the exam the students will be able to: - define the subject and tasks of tourism geography research - explain the phenomenon and development of tourism and recreation - recognize the role of geography in tourism research - compare geographical tourism world regionalization and regionalization of the World tourism organization (WTO) - understand and compare the significance and role of natural, social, communication and intermediary factors in tourism development - distinguish tourism significance of continents, particular states and their tourism regions - explain the phenomenon and factors of the Croatian tourism - single out the Croatian tourism regions		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Tourism geography - subject and tasks of research. 2. Appearance and development of tourism and recreation. 3. Role of geography in tourism research. 4. Tourism of Anglo-America. 5. Tourism of Latin America. 6. Tourism of Australia and Oceania. 7. Tourism of Asia. 8. Tourism of Africa. 9. European Mediterranean as a tourism region. 10. Tourist area of the Alps. 11. Tourism of Scandinavia and Western Europe. 12. Tourism of Central, Eastern and Southeast Europe. 13. Appearance and development factors of the Croatian tourism. 14. Geographic position of tourism in Croatia and the role of transport in tourism development. 15. Tourism regions in Croatia.					
2.6. Format of instruction:	X lectures X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning X field work		☐ independent assignments X multimedia and the internet ☐ laboratory X work with mentor ☐ (other)		2.7. Comments:	
2.8. Student responsibilities	Attending classes and seminars regularly. Written seminar based on individually collected and analyzed literature					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,5	Research		Practical training	
	Experimental work		Report		(other)	
	Essay	0,5	Seminar essay	0,5	(other)	
	Tests	0,5	Oral exam	1,0	(other)	
	Written exam	1,0	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Class attendance, activity in making seminars and writing essays, taking part in the discussions during the lectures, evaluation of colloquium, written and oral exams.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Curić, Z., Glamuzina, N., Opačić, V. T., 2013: *Geografija turizma*, Naklada Ljevak,	10	yes

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Zagreb.		
	Blažević, I., Knežević, R., 2006: *Turistička geografija Hrvatske*, Fakultet za hotelski i turistički menadžment, Opatija.	10	yes
	Čavlek, N. i suradnici, 2011: *Turizam – ekonomske osnove i organizacijski sustavi*, Školska knjiga, Zagreb.	10	yes
	Pepeonik, Z., 2003: *Turistička geografija svijeta*, Školska knjiga, Zagreb.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Williams, S., 2009: *Tourism Geography*: *A New Synthesis*, Routledge, London and New York. Williams, S., Lew, A. A., 2014: *Tourism Geography*: *Critical Understandings of Place, Space and Experience*, Routledge, London and New York.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	- Self-evaluation of the teaching process: revision of the teaching purposes, modernization of the course contents , teaching strategies' use, evaluation of the learning results by the students' successfulness analysis (on the basis of their own documentation) - University and/or faculty students' questionnaires - Questionnaires after employment, i. e. after the first year of work (survey of employment possibilities after the study and progress in profession)		
2.14. Other (as the proposer wishes to add)	-		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Sanja Faivre	1.6. Year of the study programme	2nd
1.2. Name of the course	**Geomorphology**	1.7. Credits (ECTS)	6
1.3. Associate teachers	Neven Bočić	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+0+30+0 (3+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The course objectives are: acquiring knowledge from the field of general geomorphology, get acquired with properties, creation, evolution and recent dynamics of the Earth relief. Students will learn how to recognise main relief forms and understand their formation under main endogenous and exogenous processes.		
2.2. Course enrolment requirements and entry competences required for the course	Passed the examination - Geology		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Bachelors of geography operate with:** Knowledge and understanding of: Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. Appropriate statistics and graphic techniques. Methods in cartography, interpretation of elements and contents of geographical maps. Fundamentals of structural and exogenous geomorphology. Geographical distribution and usage of water resources. Climate elements, factors and types. Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information.		

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	The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Orientation in space with modern technologies and other skills needed in fieldwork. Mapping of geographic data, georeferencing. Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-Explaining the relief features of the Earth -Explaining the developments of ideas of the scientific discipline -Apply methodology of the structural and exogenous geomorphology in the explanation of relief formation -Define and compare planetary relief forms -Explaining the relief formation plate margins and plate interiors -On chosen examples explaining the influence of the exogenous processes on particular relief form -On chosen examples apply appropriate statistic and graphic methods and techniques, and interpret them -Applying knowledge in determining, defining and solving spatial problems of medium-level complexity.
2.5. Course content broken down in detail by weekly class schedule (syllabus)	**COURSE CONTENT**: 1. Introduction 2. General properties of the Earth relief and factors of its development -Endogenic and exogenic factors. 3. The developments of ideas. 4. Endogenic processes and landforms – • Surface expressions of subsurface structures • Global morphology and tectonics (Landforms and tectonics of plate margins & Landforms and tectonics of plate interiors) • Landforms associated with igneous activity

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<table>
<tr><td></td><td colspan="6">• Earthquakes and landforms.
5. Exogenic processes and landforms
6. Weathering processes and landforms
7. Slope processes and forms
8. Fluvial processes and landforms
9. Coastal processes and landforms
10. Glacial and periglacial processes and Landforms
11. Karst and fluviokrst processes and landforms
12. Aeolian processes and landforms
13. Biogenic processes and landforms
14. Anthropogenic landforms.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular attendance to courses (80% practical) finished practical (6) and colloquium.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>1</td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>5</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">The grade at the final exam is defined on regularity of attendance to courses and practical, on evaluation of the colloquium and written exam.</td></tr>
<tr><td rowspan="4">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Summerfield, M., 1991: Global Geomorphology, Longman, London, 537 pp.</td><td>1</td><td>yes</td></tr>
<tr><td colspan="3">Ford, D., Williams, P., 2007: Karst Hydrogeology and Geomorphology, Chapman & Hall, 601 pp.</td><td>5</td><td>yes</td></tr>
<tr><td colspan="3">Holden, J. (Ed.), 2012: An Introduction to Physical Geography and the Environment, Pearson, 876 pp.</td><td>3</td><td>yes</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.12. Optional literature (at the time of submission of study programme proposal)	Huggett, R., 2005: *Fundamentals of Geomorphology*, Routledge, 386 pp.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	Procedures set forth in the Regulations book and the Reference manual on quality management at the University of Zagreb, and at the Faculty of Science: - student questionnaire at the University and Faculty level -auto evaluation of courses: modernisation and revision of aims and content of the course, the strategy of teaching and learning; evaluation of learning outcome by the analysis of student success based on the Student office and our own records -questionnaire after exit of the University: evaluation of Graduate Education Programme		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Martina Jakovčić	1.6. Year of the study programme	2nd
1.2. Name of the course	**Transportation Geography**	1.7. Credits (ECTS)	5
1.3. Associate teachers	Slaven Gašparović	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+30+0+0 (2+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The general aim is to gain knowledge about transportation geography as scientific discipline and explanation of development, types and functioning of transportation and its impact on spatial and structural changes. Students will began knowledge about main methods of transportation research, development of certain types of transportation its impact on economic developments and other social aspects o everyday life (migration, free time...)- Special attention will be given to study of transportation systems of Croatia and its integration into European transportation system and the role on contemporary globalization problems.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	Knowing and understanding of factors of development, characteristic of specific transportation modes, transportation networks, dynamic of transportation flows, interconnection between transportation and economic activities. Applying knowledge in determining, defining and solving spatial problems of medium-level complexity in transport organization Ability to explain and discuss relevant and actual transportation geographic problems and processes. Ability to conduct basic analysis of transportation networks at specific areas. Mapping of geographic contents. Continuous professional development. Conducting literature research and use databases and other sources of information.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	To know objects and goals and methodology of research in transportation geography Explain division, development and characteristics of certain modes of transportation, impact of transportation on spatial organization, importance of transportation on contemporary world and process off globalization. Explain factors of development, basic characteristics of transportation networks and transportation flows in Croatia and to		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">explain them with chosen examples.
Evaluate position and role of Croatia in paneuropean transportation corridors.
Use relevant methods and approaches of transportation geography in collecting, processing and interpretation of spatial data.
Apply knowledge in determination and solving of spatial problems of medium level complexity.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Transportation geography, objects, and goals of research
2. Methods of transportation – geographic research part I
3. Methods of transportation – geographic research part II
4. Methods of transportation – geographic research part III
5. Division of transportation, development and characteristics of certain modes of transportation part I
6. Division of transportation, development and characteristics of certain modes of transportation part II
7. Division of transportation, development and characteristics of certain modes of transportation part III
8. Division of transportation, development and characteristics of certain modes of transportation part IV
9. Factors of development of transportation systems part I
10. Factors of development of transportation systems part II
11. Impact of transportation connectivity and accessibility on the process of transportation marginalization
12. Role of transportation in contemporary world and it impact on process of globalization
13. Transportation system of Croatia – factors of development, characteristics of transportation networks and flows part I
14. Transportation system of Croatia – factors of development, characteristics of transportation networks and flows part II
15. Croatia and paneuropean transportation corridors.</td></tr>
<tr><td rowspan="2">2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td colspan="5"></td><td></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular attending of lecture and seminars. Active participation in lectures. Preparation of seminar essay. Application of cartographic methods in field research (o organization and conduction of mapping). Oral and written report on the results of field work.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>1,5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>3,0</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.10. Grading and evaluating student work in class and at the final exam	Notes on attendance of lectures, seminars and mapping and noting student activities. Final mark will be a result of a written exam and seminar essay.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Hoyle, B. S., Knowles, R. D. (Ed.), 1996: *Modern Transport Geography*, John Wiley &Sons.	10	yes
	Black, W. R., 2003: *Transportation: a geographical analysis*, The Guilford Press, New York.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Additional literature will be specified according to student preferences.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	Procedures outlined in *Regulations and Handbook on the Quality Assurance* at the University of Zagreb and the Faculty of Science: - university and faculty student survey - teaching self-evaluation: modernizing and reassessment of course's goals and content, and strategy of teaching and learning; evaluation of learning outcomes by analysis of students level of success according to Student Office data and self-records - outgoing survey: undergraduate university study evaluation - interview with companies, institutions and institutes where students perform their practical work		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Laura Šakaja	1.6. Year of the study programme	2nd
1.2. Name of the course	**Cultural Geography**	1.7. Credits (ECTS)	5
1.3. Associate teachers	Lana Slavuj Borčić	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+30+0+0 (2+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course - research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The aim of the course is to provide essential knowledge of the basics of cultural geography, its area of interest and its key methods. Students are expected to adopt a critical approach to study topics and to develop the ability to analyze the role of space in shaping different cultural contexts. Students will learn the methodology of cultural geography through the practical work on seminar essay. They will be expected to present seminar essay in written and oral form and to demonstrate the ability to reconstruct the social, political and cultural processes embedded in cultural landscapes.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** - geographic terminology, definitions, key theories and methods -causality relations between the elements and factors of natural environment and society in the formation of cultural landscapes - process of cultural globalisation and its influence on the transformation of cultural landscape **Cognitive, practical and generic abilities and skills:** - applying knowledge in determining, defining and solving spatial problems of medium-level complexity. -the ability to interpret and discuss relevant and actual geographic problems and processes - the skills needed for presentation of scientific contents and stances in written and oral form - the skills needed for fieldwork. -conducting literature research and use databases and other sources of information - applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="3">Knowing and understanding the subject of cultural geography and its place in the structure of social sciences;
Knowing and understanding linguistic and religious map of the world;
Ability to analyze ethnic and religious cultural landscapes;
Ability to identify and explain different discourses, especially in the case of the terms "race" and "nation";
Ability to analyze the local effects of cultural globalization;
Ability to explain the role of politics and ideology in shaping the cultural landscape;
Ability to understand and interpret the relational nature of identity and the role of the Other in shaping selfhood;
Ability to understand and evaluate the development potential of culture.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="3">1. The subject of cultural geography and its place in the structure of social sciences. Key concepts in cultural geography.
2. Research methods in cultural geography.
3. Linguistic map of the world. Diffusion of languages. Croatian dialect map.
4. Universal religions: distribution, sacred places and symbolic landscapes.
5. Ethnic religions: distribution, sacred places and symbolic landscapes.
6. Notion of "race". Race map of the world. History of racism and its contemporary expressions.
7. Cultural globalization and its impact. Concept of nation and national identity. "Deterritorialization" of culture. Migrant communities.
8. Ethnic regions. Cultural diffusion and ethnicity. Ethnic neighborhoods and segregation. Ethnic landscapes. Dual identities.
9. Landscape as a system of social reproduction. Social inequality and space. Landscapes and social exclusion.
10. Landscape symbolism. Value systems and landscapes. Landscape, politics and ideology. Post-socialism and urban landscape transformation.
11. Spatial perception and mental maps. Vernacular cultural regions. Imaginative geographies. Mental map of Europe in the Croatian perspective.
12. Geography of food. Food and ethnic communities. Globalization and food.
13. Landscape representations in literature, film and painting. Geography and music.
14. Cultures of production. Production and the way of life.
15. Cultures of consumption. Places of consumption.</td></tr>
<tr><td rowspan="2">2.6. Format of instruction:</td><td>X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td>X independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="3">Attendance to class, completed seminar essey, multimedial presentation of seminar essay</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,5	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay	1	(other)	
	Tests	0,5	Oral exam	2	(other)	
	Written exam	1	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Class attendance, quality of seminar esay, mid term test, written and oral exam.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Crang, M., 1998: *Cultural Geography*. London: Routledge.	1	yes
	David Atkinson, Peter Jackson, David Sibley, Neil Washbourne (ur.) *Kulturna geografija: kritički rječnik ključnih pojmova,* Zagreb: Disput 2008.	10	yes
	Rubenstein, J. R., 2007: *The Cultural Landscape. An Introduction to Human Geography*, Prentice Hall.	2	yes

2.12. Optional literature (at the time of submission of study programme proposal)	Shurmer-Smith, P. (ed.) *Doing Cultural Geography.* London: Sage Publications. 2002. Driver, F., Nash, K. , And Cresswell, T., 1999: *Social and Cultural Geographies*, in: Cloke, P., Crang, Ph. And Goodwin, M., *Introducing Human Geographies,* London: Arnold, pp. 207-233.
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Vedran Prelogović	1.6. Year of the study programme	2nd
1.2. Name of the course	**Geography of Europe**	1.7. Credits (ECTS)	4
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+15+0+0 (3+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The main objective of the course is to enable students to understand regional complex (physical and social characteristics) of Europe. Special attention within this course is given to: writing of report, reading of selected texts related to the different aspects of regional geography of Europe, thematic discussions on different topics. Particular objectives of the course are: synthesis of contemporary theory and methodology of regional geography; emphasise and explain regional differences in Europe, that are induced by interaction of different economic, social, cultural and political factors on global, regional and local level and to emphasise importance of European integrations.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. Appropriate statistics and graphic techniques. Methods in cartography, interpretation of elements and contents of geographical maps. Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. The role of population in processes and functional spatial organization. Urban and rural spatial systems, their interrelationship and structural and functional characteristics. Systems and models in economic geography, their structure, dynamics and development factors on various spatial levels. Factors of development and characteristics of transportation modes, transportation networks, dynamics of transportation flows, impacts of relationship of transport and other economic activities. Processes in political geography, with emphasis on globalisation and integration processes.		

	Geographic aspects of socio-cultural processes. Causality relations between the elements and factors of natural environment and society. Concept of region and regionalisation. Modern geography of Croatia and Europe. Concept of regional and sustainable development. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	- explain physical and social geographic characteristics of Europe - explain causes and outcomes of regional differences in Europe - detach and to explain characteristics of main European regions - make a research on a selected topic and to present the results in a written and oral form - write a report on a selected topic
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 INTRODUCTORY LECTURE – Goals and aims; Students obligations; Schedules of written and oral exams; Notion and definition of the term Europe 2 PHYSICAL GEOGRAPHIC CHARACTERISTICS OF EUROPE 1 – Geomorphology; Sea and coast; Inland waters 3 PHYSICAL GEOGRAPHIC CHARACTERISTICS OF EUROPE 2 – Climate; Vegetation; Ecological problems and protection

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">of the environment
4 DEMOGRAPHIC CHARACTERISTICS OF EUROPE 1 – Distribution and density; Dynamics and development of population; Natural increase of population
5 DEMOGRAPHIC CHARACTERISTICS OF EUROPE 2 – Migrations; Structures of population
6 CITY AND URBANIZATION – Development of urban areas; Regional differences in the rate of urbanization; New types of urbanization
7 ECONOMIC GEOGRAPHIC CHARACTERISTICS OF EUROPE – Agriculture; Industry; Trade; Tourism; Transport; Energy
8. ECONOMIC AND POLITICAL INTEGRATIONS – European integrations; Regional development and regional differentiation
9 UNITED KINGDOM AND IRELAND; NORDIC (Denmark, Norway, Sweden, Finland, Iceland) AND BALTIC (Estonia, Latvia, Lithuania) COUNTRIES
10 FRANCE AND BENELUX (Belgium, The Netherlands, Luxembourg)
11 GERMANY
12 ALPINE COUNTRIES (Switzerland, Austria, Slovenia); EASTERN-CENTRAL EUROPE (Poland, Czech Republic, Slovakia, Hungary)
13 ITALY
14 SPAIN AND PORTUGAL; COUNTRIES OF FORMER YUGOSLAVIA (Bosnia and Herzegovina, Serbia, Montenegro, Kosovo, Macedonia), ROMANIA, BULGARIA, GREECE, ALBANIA
15 EASTERN EUROPE (European part of Russia, Belarus, Ukraine, Moldavia); SMALL COUNTRIES ; EXCLAVES/ENCLAVES; AREAS WITH SPECIAL STATUS</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
X multimedia and the internet
☐ laboratory
X work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular class attendance. Writing of the report. Oral presentation of the written report within the thematic discussions.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>2</td><td>Project</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Written evaluation, oral examination.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Title	Number of copies in the library	Availability via other media
2.11. Required literature (available in the library and via other media)	Blouet, B. W., 2012: *The EU and Neighbors. A Geography of Europe in the Modern World*, John Wiley and Sons, Hoboken.	5	yes
	Murphy, A. B., Jordan-Bychkov, T. G., Bychkova Jordan, B., 2009: *The European Culture Area. A Systematic Geography*, Rowman and Littlefield Publishers, Lanham.	5	yes
	Ostergren, R. C., Le Bosse, M., 2011: *The Europeans. A Geography of People, Culture, and Environment*, The Guilford Press, New York, London.	5	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Gebhardt, H., Glaser, R., Lentz, S. (ur.), 2013: *Europa – eine Geographie*, Springer Spektrum, Berlin, Heidelberg. Lichtenberger, E., 2005: *Europa: Geographie, Geschichte, Wirtschaft, Politik*, Primus Verlag, Darmstadt. Rebernik, D., 2009: *Osnove fizične geografije Europe*, Filozofska fakulteta, Ljubljana.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Zoran Stiperski	1.6. Year of the study programme	2nd
1.2. Name of the course	**Political Geography**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Jelena Lončar	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Understanding the political processes in the world. Discussing the important political and geographical balance for Croatia.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	The course contributes to understanding of development factors and dynamics and structure of the political systems in the world. The course contributes to the development of professional competence in geography science, the development of competence for independent research and creating the foundation for continuing education.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-explain the basic terms: state, society, identity -explore the political geography of natural resources and environmental protection -explore the concept of national identity -explore the trends and differences in representative democracies and elections in the world -explain the concept of balance of power and versatility on the example of Europe -explore the development of foreign relations in Europe -establish the importance of the Diaspora in the world		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 Introduction to political geography 2 Terms and concepts: power, territory, borders, size, location 3 Terma and concepts: nation, state, society, territory, identity 4 Country: sovereignty, subjectivity, territoriality 5 Representative democracy and the electoral geography 6 Human Rights and Citizenship		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">7 Political geography of natural resources
8 Global Environmental Policy
9 Political geography of various organizations
10 Transnational political movements and trends
11 Position of the diaspora in the world
12 The concept of balance of power and the notion of universality
13 The development of foreign relations in Europe since the Congress in Vienna to the present
14 Political geography of the European Union
15 Terms and concepts: Central Europe, Southeast Europe, Balkans</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attending classes and seminars regularly. Written seminar based on individually collected and analyzed literature.</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>1</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td></td><td colspan="5"></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">The final grade is determined on the basis of the seminar evaluation, colloquium results, written and oral exams. All elements of evaluation except colloquium must be positive.</td></tr>
<tr><td rowspan="5">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Stiperski, Z., 2014: Internal course materials Political Geography, Department of Geography, Faculty of Science, Zagreb.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3">Painter, J., 2009: Political Geography, Sage.</td><td>1</td><td>yes</td></tr>
<tr><td colspan="3">Calvocoressi, P., 2003: Svjetska politika nakon 1945., Globus.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td>2.12. Optional literature (at the time of submission of study programme</td><td colspan="6">Baylis, J., Smith, S., Owens, P., 2011: The Globalization of World Politics – An introduction to international relations, Online</td></tr>
</table>

proposal)	Resource Centre, Oxford University Press. Gallaher, C., Dahlman, C. T., Gilmartin, M., Moutz, A., Shirlow, P., 2009: *Key Concepts in Political Geography*, Sage. Jones, M., Jones, R., Woods, M., 2004: *An Introductional to Political Geography – Space, Place and Politics*, Routledge – Taylor & Francis Group. Agnew, J., 2002: *Making Political Geography*, Hodder Education. Cox, Law, Robisnson, 2008: *Handbook of Political geography*, Sage. Agnew, Michell, Toal, 2009: *A companion to Political geography*, Blackwell. Samuel P. Huntington, 1998: *Sukob civilizacija i preustroj svjetskog poretka*. Izvori. Zagreb. Hastings, A., 1997: *The construction of nationhood. Ethnicity, religion and nationalism*. Cambridge Univ. Press. Hobsbawn, E. J., 1993: *Nacije i nacionalizam: program, mit, stvarnost*. Novi Liber, Zagreb. Short, J. R., 1993: *An introduction to political geography*, 2nd ed. Rutledge, London, New York. Taylor, P. J., Colin, F., 2000: *Political Geography. Wolrd-economy, nation-state & locality*. 4th ed. Pearson Education Ltd., Harlow. Wolkersdorfer, G., 2001: *Politische und Geopolitik zwischen Moderne und Postmoderne*. Heidelberger Geographische Arbeiten 111.
2.13. Quality assurance methods that ensure the acquisition of exit competences	The procedures listed in the Rule Book and the Manual of Quality Management at the University of Zagreb and the Faculty of Science: - University and college student survey - Self-evaluation of teaching: updating and revising the aims and subjects of course; updating teaching and learning strategies; evaluation of learning outcomes by analyzing students performance based on the personal data and data of the Student Administration Office - Exit polls: evaluation of undergraduate study - Interview with companies, institutions and institutes where students perform their practical work
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Aleksandar Toskić	1.6. Year of the study programme	3rd
1.2. Name of the course	**Geoinformatics**	1.7. Credits (ECTS)	12
1.3. Associate teachers	Ivan Šulc	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+30+0 (2+0+2+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Knowledge of GIS basics and potentials of application of GIS technology in research work and presentation of research results		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Applying of methodology in geography and current investigations in its field. Theoretical basis of geomatics with emphasis on geographic information system (GIS). Methods in cartography, interpretation of elements and contents of geographical maps. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Applying appropriate GIS techniques for solving problems of medium complexity. Orientation in space with modern technologies and other skills needed in fieldwork. Mapping of geographic data, georeferencing. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results.		

	Generic abilities and skills: Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	- explaining application areas of GIS - distinguishing GIS software types and data models in GIS - knowledge and application of skills of spatial database creating ang management and spatial analysis - knowledge of limitations of cartographic visualization in GIS - applying spatial modelling in GIS - knowledge of standardization and spatial data infrastructure
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Geoinformatics – definition and basic concept 2. Elements of GIS 3. Application fields of GIS 4. Development of GIS 5.-6. Types of GIS software 7. Real world and GIS models. Descrete and continuous spatial data 8. Uncertainty of spatial data 9.-10. Geometry and attribute data. Metadata 11. Coordinate systems and projections 12. Georeferencing 13.-14. Data models in GIS: raster and vector 15. TIN 16.-17. Data acquisition in GIS. Primary and secondary sources of data. 18. Input and editing of spatial data 19.Topology in GIS 20. Acquisition of attribute data. Types of attribute data. 21. Creating and maintaining geographic databases 22. Joining geometry and attribute data 23.-24. Visualization of spatial data in GIS 25. Elementary spatial analysis: Querying, measurements, shapes

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">26. Spatial analysis: slope and aspects .
27. Spatial analysis: buffer, overlay
28. Methods of spatial interpolation.
29. Spatial modelling in GIS.
30. Standardization and spatial data infrastructure</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attendance to lectures and execises.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,3</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>4,7</td><td>Oral exam</td><td>2,3</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>4,7</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Observation of class attendance and making exercises. The final grade is made on the basis of test, written exam, oral exam results and quality of seminar essay.</td></tr>
<tr><td rowspan="5">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Longley, P. A., Goodchild, M. F., Maguire, D. J., Rhind, D. W., 2010: Geographic Information Systems and Science, John Wiley &Sons., Chichester.</td><td>4</td><td>yes</td></tr>
<tr><td colspan="3">Heywood, I., Cornelius, S., Carver, S., 2005: An Introduction to Geographical Information Systems, Persons Education Limited, Harlow.</td><td>1</td><td>yes</td></tr>
<tr><td colspan="3">Asche, H., Toskić, A., Spevec, D., Engemaier, R., 2010: The Demographic Atlas of Croatia - A Web-based Atlas Information System, Cartography in Central and Eastern Europe / Gartner, Georg; Ortag, Felix (ur.). Berlin Heidelberg: Springer, Str. 345-360.</td><td>1</td><td>yes</td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td>2.12. Optional literature (at the time of submission of study programme proposal)</td><td colspan="6"></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science .
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Ivan Zupanc	1.6. Year of the study programme	3rd
1.2. Name of the course	**Historical Geography**	1.7. Credits (ECTS)	6
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+30+0+0 (2+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Accordingly to the fact that present situation is just a latest stage of continuous process of development, main objective of the course is reconstruction past geographies. Introduce students with sources and research methods in historical geography; introduce students with different forms of space organisation in the past for using that experience in the present and in the future.		
2.2. Course enrolment requirements and entry competences required for the course	Passed the examination - Introduction to geography, Population geography.		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. Appropriate statistics and graphic techniques. Methods in cartography, interpretation of elements and contents of geographical maps. The role of population in processes and functional spatial organization. Urban and rural spatial systems, their interrelationship and structural and functional characteristics. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="3">Practical abilities and skills:
Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results.

Generic abilities and skills:
Problem solving, relating to qualitative and quantitative geographic information.
Conducting literature research and use databases and other sources of information.
Functioning effectively as an individual and as a team member.
Continuous professional development.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="3">Knowing different sources in historical geography research. To be able using specific research techniques and methods. To build geographical way of thinking. To autonomous create seminar in written form with use the specific sources and methods and knowing literature.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="3">1. Introduction
2. Historical geography – position and development of the subdiscipline
3. Historical geography – development of the subdiscipline
4. Sources and researching in historical geography
5. Map and cadastre as sources
6. Population data sources
7. Textual sources
8. Visual materials and other sources
9. Historical geographical aspects of toponyms
10. Historical environmental geography
11. Historical geography and the concept of landscape
12. Historical geography and human territoriality
13. Historical geography and settlement
14. Historical geography and the concept of heritage
15. Applied historical geography</td></tr>
<tr><td rowspan="2">2.6. Format of instruction:</td><td>X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td>☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:
-</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="3">Properly class attendance and one written seminar essay.</td></tr>
</table>

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2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	1	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay	1	(other)	
	Tests		Oral exam	1	(other)	
	Written exam	3	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	Written and oral exam. Written seminar essay.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Butlin, Robin A., 1993: *Historical Geography: through the gates of space and time*, Arnold, London.	1	yes
	Baker, Alan, R. H., 2003: *Geography and History*: Bridging the Divide, Cambridge Univeristy Press, Cambridge.	1	yes
	Historical Geography: Progress and Prospect (Ed. Michael Pacione), Routledge, London, 2011.	1	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Atkins, P., Simmons, I., Roberts, B., 1998: *People, Land & Time: An Historical Introduction to the Relations Between Landscape, Culture and Environment*, Arnold, New York. *Modern Historical Geographies* (Ed. Brian Graham; Catherine Nash), Pearson Education Limited, Harlow, 2000. *An Historical Geography of Europe* (Ed. Robin A. Butlin; Robert A. Dodgshon), Clarendon Press, Oxford, 1998.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)	-		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Nenad Buzjak	1.6. Year of the study programme	3rd
1.2. Name of the course	**Geoecology and Environment protection**	1.7. Credits (ECTS)	6
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+30+0+0 (2+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Get to know the subject of research of Geoecology. Acquire the knowledge about the features of geoecosystem and landscape types in order to define their geoecological optimal spatial organization and use in the spirit of sustainable development. Introduction to physical geographical features of the ecosystem, their spatial relationships and structure, environmental factors, the concept of stability and sustainability. Get to know characteristics of the anthropogenic influence on geo- and biodiversity, waste management issues in legislation and practice. Adopt geoecological knowledge of the features and problems of conservation and protection of karst geoecosystems on the examples from Croatia and worldwide. Adopt the terms of legislation and practical actions to protect the natural environment, introduce to the types of ecological networks and habitat RH.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. Causality relations between the elements and factors of natural environment and society. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for presenting scientific contents and stances in written and oral form. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. Conducting literature research and use databases and other sources of information. Functioning effectively as an individual and as a team member.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Continuous professional development.					
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowledge and understanding of the concept and research subject of Geoecology. Knowledge, understanding and interpretation of the role of abiotic factors of the ecosystem. Understanding and classifying types threats of ecosystems at local, regional and global levels. Understanding the basic principles of geographical classifications landscape. Knowledge and understanding of geoecological features of karst relief. Understanding and interpretation of the principles of waste management, nature and environmental protection. Knowledge of the role of ecological networks and habitat types in the system of nature protection and sustainable development.					
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Ecology and Geoecology - development and research subject 2. Ecological factors 3. Organization and classification of ecosystems 4. Geographical characteristics of geoecosystems 5. Stability and function of ecosystems 6. Anthropogenic impacts on biodiversity and geodiversity- 7. Waste management 8. Geoecological features of desertification 9. Karst geoecosystems 10. Geoecology of Croatian karst 11. Geographical bases of landscape classification 12. Nature and Environment Protection - political and legislative frameworks 13. Geographic approach to the evaluation and planning of protected areas 14. Ecological network in the system of nature protection 15. Habitats and habitat types					
2.6. Format of instruction:	X lectures X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning ☐ field work		☐ independent assignments ☐ multimedia and the internet ☐ laboratory ☐ work with mentor ☐ (other)		2.7. Comments:	
2.8. Student responsibilities	Properly class attendance and one written and oral seminar essay.					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS*	Class attendance	1,5	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay	1,5	(other)	

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credits is equal to the ECTS value of the course)	Tests		Oral exam	1,5	(other)	
	Written exam	1,5	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	Written and oral examination. Class attendance 25 % + Seminar essay 25 % + written exam 25 % + oral exam 25 %.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Bognar, A., Faivre, S., Buzjak, N., Pahernik, M., Bočić, N., 2012: Recent Landform Evolution in the Dinaric and Pannonian Regions of Croatia. U: Lóczy, D., Stankoviansky, M., Kotarba, A. (Ed.): *Recent Landform Evolution*. Heidelberg, London, New York: Spriger, 313-344.	1	pdf
	Glavač, V., 2001: *Uvod u globalnu ekologiju*. Državna uprava za zaštitu prirode i okoliša, Zagreb.	10	pdf
	Kirby, A., Landmark, K., 2011: *Desertification*. UNCCD & Zoi Environment Network, Geneva.	1	pdf
	Martinić, I., 2010: *Upravljanje zaštićenim područjima prirode. Planiranje, razvoj i održivost*. Sveučilište u Zagrebu, Šumarski fakultet, Zagreb.	10	pdf
2.12. Optional literature (at the time of submission of study programme proposal)	Forman, R., Godron, M., 1986: *Landscape ecology*. John Wiley & Sons, New York. Springer, O., Springer, D., 2008: *Otrovani modrozeleni planet*. Priručnik iz ekologije, ekotoksikologije i zaštite prirode i okoliša. Meridijani, Samobor. Skupina autora, 2001: *Ekološki leksikon*. Barbat, Zagreb. Zakoni s područja zaštite okoliša, prirode, gospodarenja otpadom; Narodne novine. Relevant papers from magazines: Hrvatski geografski glasnik, Geografski horizont, Geoadria, Geologia Croatica, Natura Croatica, Socijalna ekologija, Landscape ecology etc.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)	Working knowledge of English.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Borna Fuerst-Bjeliš	1.6. Year of the study programme	3rd
1.2. Name of the course	**Regionalization principles**	1.7. Credits (ECTS)	6
1.3. Associate teachers	Marin Cvitanović	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+30+0+0 (2+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1

2. COUSE DESCRIPTION	
2.1. Course objectives	Knowing the concept of region, as well as concepts such as regionalism, regional development and regionalization. Understanding the sense, basic principles, methods and techniques of regionalization.. Understanding the concepts of spatial identities: identities of the region and regional identities.Understanding the formal and varnacular elements of the identity of the region. Knowing the approaches and methods of regional identity research.
2.2. Course enrolment requirements and entry competences required for the course	-
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. Appropriate statistics and graphic techniques. Causality relations between the elements and factors of natural environment and society. Concept of region and regionalisation. **Cognitive, practical and generic abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processesin regionalization issues. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results.

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<table>
<tr><td></td><td colspan="3">Applying appropriate GIS techniques for solving problems of medium complexity.
Problem solving, relating to qualitative and quantitative geographic information.
Conducting literature research and use databases and other sources of information.
Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet.
Functioning effectively as an individual and as a team member.
Continuous professional development.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="3">Understanding of the complexity of the regional concept, as the central concept.of geography.
Understanding of the importance of all the spatial segments in regional study and regionalization.
Knowing different types of regions.
Understanding of basic principles of regionalization.
Understanding and knowing concepts, criteria, variables and values.
Knowing and aquiring the ability of applying quantitative, qualitative and graphic methods in regionalization.
Understanding of concepts of regional identity, regional consciousness, identity of the region and regionalism.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="3">1. Concept of region.
2. Region as central concept in geography
3. Regional approach
4. Definition and types of regions
5. Regionalization – development and basic concepts
6. Approaches to regionalization in Croatia
7. Regional science
8. Regional delineation– concept, methods
9. Homogene and nodal regions.
10. Physiognomic regions and cultural landscapes
11. Region as the experience and perception
12. Spatial perceptions and mental maps
13. Vernacular (perceptive), historical, traditional regions
14. Regional identities
15. Regionalism</td></tr>
<tr><td>2.6. Format of instruction:</td><td>X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety</td><td>X independent assignments
X multimedia and the internet
☐ laboratory
X work with mentor</td><td>2.7. Comments:</td></tr>
</table>

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	☐ partial e-learning ☐ field work		☐ (other)			
2.8. Student responsibilities	Regular class attendance, preparation and presentation of research project; active participation in workshops.					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	1	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay		(other)	
	Tests	1	Oral exam		(other)	
	Written exam	2	Project	2	(other)	
2.10. Grading and evaluating student work in class and at the final exam	One preliminary tests during the semester, completion of research assignment and project. Completed final written exam.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Cifrić, I., Nikodem, K., 2007: Relacijski identiteti, Socijalni identitet i relacijske dimenzije, *Društvena istraživanja* 3 (89), 331-358.	10	yes
	Claval, P., 1998: *An Introduction to Regional Geography*, Blackwell, Oxford.	1	yes
	Paasi, A., 2002a: Bounded Spaces in the Mobile World: Deconstructing "Regional Identity", *Tijdschrift voor Economische en Sociale Geografie* -2002, Vol. 93, No.2, 137-148.	10	yes
	Paasi, A., 2002b: Place and region: regional worlds and words, *Progress in Human Geography* 26(6), 802-811.	10	yes
	Paasi, A., 2003: Region and Place: Regional identity in question, *Progress in Human Geography* 27(4), 475-485.	10	yes
	Perkmann, M., Sum, N.(eds.), 2002: *Globalization, Regionalization and Cross-border Regions*, Palgrave Macmillan,London.	1	yes

2.12. Optional literature (at the time of submission of study programme proposal)	
	Fuerst-Bjeliš, B., 2011: Slike i mijene regionalnoga identiteta: geografska imena na kartama ranoga novoga vijeka (odabrani primjeri), u: *Geografska imena* (ur. Skračić, V. i Faričić, J.), Sveučilište u Zadru, HGD, Zadar.
	Fuerst-Bjeliš, B., 2014: Teritorijalizacija i deteritorijalizacija pograničnih društava: Morlakija i Mala Vlaška, *Acta geographica Bosniae et Herzegovinae* 1 (2), 53-64.
	Rogić, V., 1983: Nacrt uvjetno-homogene regionalizacije SR Hrvatske, *Geografski glasnik* 45, 75-89.
	Rogić, V., 1984: Jednostavnost i fleksibilnost koncepta nodalno-funkcionalne diferencijacije SR Hrvatske, *Geografski glasnik* 46,

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	75-80.
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	Note on references by V. Rogic, 1983 and 1984 in supplementary literature: although they are older papers, they are essential in the theoretical sense, because they deal with the corresponding concept of regionalization in general, which has particular importance for Croatian geography, not only in terms of knowledge of the development of Croatian scientific geographic thought; the basic principle of this concept forms the basis of all contemporary regionalizations of Croatian territory.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dražen Njegač	1.6. Year of the study programme	3rd
1.2. Name of the course	**Geography of Croatia**	1.7. Credits (ECTS)	5
1.3. Associate teachers	Slaven Gašparović	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+30+0+0 (3+2+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	General knowledge of Croatia and its regions; understanding of the modern processes and their influence on the Croatia's development; knowing Croatia in wider regional and European context. Students have to be able to interpret and discuss relevant and actual geographic problems and processes in Croatia.		
2.2. Course enrolment requirements and entry competences required for the course	Exam of Population Geography.		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. Causality relations between the elements and factors of natural environment and society. Causality relations between population, settlements and economic activities in Croatia. Urban and rural spatial systems, their interrelationship and structural and functional characteristics. Economic-geographical factors of the development, dynamics and structure of the national economy. Concept of region and regionalisation of Croatia. Concept of regional and sustainable development of Croatia. Historic-geographical development of the Croatian territory and modern geography of Croatia. Applying of methodology in regional geography and current investigations. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes in Croatia.		

	The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Skills needed in fieldwork. Mapping of geographic data, georeferencing., Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-to explain the territorial shaping of Croatia and its borders -to evaluate geographic position and size of Croatia in comparison with seleted European and non-European countries -to apply the knowledge of the basic courses in explaining the meaning of the natural environment in the settling and life organization in Croatia -to analyze the development of settlements in Croatia -to explain the processes of industrialization, de-agrarization and urbanization in Croatia and compare it with the same processes in the world -to evaluate the characteristics and changes in the development of urban and transport systems in Croatia -to apply the methods and principles of regionalization in Croatia -to explain the polarization in the regional development od Croatia -to identify the problem areas in Croatia and measures for their sustainable development -to explain the border regions development and evaluate the role of Croatia in the globalization process
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Size, borders and territorial shaping of Croatia. 2. Physical-geographic characteristics of Croatia. Natural environment as a factor of settling and life organization in Croatia 3. Historical-geographic development. The development of settlements in Croatia and its regions. 4. Demographic characteristics of Croatia. Population structures. 5. Social-geographic factors of the development. Development and characteristics of Croatia's economy. 6. Industrialization, de-agrarization and urbanization. Urban and transport systems of Croatia. 7. Polarization and uneven regional development of Croatia. Core-periphery concept. Development axes. 8. Regional structure of Croatia. Physiognomic, nodal-functional and planned regions of Croatia. 9. Problem areas. Border regions.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	10. Central Croatia. Structure, characteristics, specifics. 11. Eastern Croatia. Structure, characteristics, specifics. 12. Hilly-mountaineous Croatia. Structure, characteristics, specifics. 13. Northern Croatian coastland. Structure, characteristics, specifics. 14. Southern Croatian coastland (Dalmatia). Structure, characteristics, specifics. 15. Position and meaning of Croatia regarding Europe. Croatia and global development.						
2.6. Format of instruction:	X lectures X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning X field work		☐ independent assignments ☐ multimedia and the internet ☐ laboratory ☐ work with mentor ☐ (other)		2.7. Comments:		
2.8. Student responsibilities	Regular class attendance, oral presentation of written essay, field work.						
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,5	Research		Practical training		
	Experimental work		Report		(other)		
	Essay		Seminar essay	0,5	(other)		
	Tests	0,5	Oral exam	2	(other)		
	Written exam	1,5	Project		(other)		
2.10. Grading and evaluating student work in class and at the final exam	The final grade is based on the written exam, oral exam and written essay. Each component has to be evaluated positively.						

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Group of authors: *Geografija SR Hrvatske*, Šk. knjiga, Zagreb, 1974/75.	10	yes
	D. Njegač: *Geografija Hrvatske* (Internal course materials), Faculty of Science, Department of Geography, Zagreb, 2004.	10	yes
	Articles from the geographic journals (Hrvatski geografski glasnik/Croatian Geographical Bulletin, Acta Geographica Croatica, Geoadria, Geografski horizont...)	10	yes

2.12. Optional literature (at the time of submission of study programme proposal)	Veliki atlas Hrvatske, Mozaik knjiga, Zagreb, 2012. Magaš, D., 2013: *Geografija Hrvatske*, Sveučilište u Zadru, Odjel za geografiju, Meridijani, Zadar-Samobor.

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Stjepan Šterc	1.6. Year of the study programme	3rd
1.2. Name of the course	**Geographical theoretical approach**	1.7. Credits (ECTS)	3
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	15+15+0+0 (1+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	40
1.5. Status of the course	Required	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Enable students for recognition and definition of geographical research field of interest. Introduce students with the geographical theoretical concept particularities. Train students for applicability of common and standard research methods. Explain students the theoretical distinction of geographical space. Qualify students to validate the spatial context, relationship, process and law meaning. Introduce students with the spatial identification and modelling. Insight students with the meaning of spatial analysis in spatial planning process. Qualify students to predict and project future spatio-temporal laws. Enable students to understand objective spatial reality. Develop among students the research logics of geographical space.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	This course contribution to the programme is held in the definition of outer and inner research frame, in directioning the inquiry towards crucial processes in space and in the comprehension of spatial laws and objective spatial reality. Very complex context, relationship and link conditionality in geographical space, unique methodology and theoretical concept, research task definitions, individual practice in the research steps, and the recognition of spatial complexity have been validated. Also, the spatial allocate and function determination, spatial typization and regionalization, spatial modelling, projections of future changes, applicability of pertinent methodology, research epistemology comprehension etc., have been appointed.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning	Outcomes expected on the level of this course are linked with the high-level education in which the concerned knowledge points out the folowing abilities.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td>outcomes)</td><td colspan="6">1. The ability of spatial content observing, defining, categorizing, mapping and clarifying.
2. The research ability of spatial law consideration, discussion, detection, definition, projection and direction.
3. Extended epistemology and coverage of the special approach.
4. Cognitive and cognition ability of revealing conditioned spatial links among complex contexts in geographical space, its causal clarification and resolvement.
5. The ability of complex methodological system appliance in interdisciplinary approach and in logicaly settled fundamental spatial relations.
6. Individual approach in spatial disproportion perceivement and in research task definition.
7. The ability of the empiric research which can be applicable in basic spatial plans.
8.Spatial functional organization ability in accordance with the phylosophy and logics of space.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Geographical theoretical concept.
2. Sistematizations and approaches within scientific system.
3. Outer and inner research subject-matter of geography.
4. Phylosophy, logisc and functionality of space.
5. Geographical space through time.
6. Research methods and techniques.
7. Geographical surface and geographical space.
8.Principles of detaching geographical disciplines.
9. Fundamentality of geography.
10. Interdisciplinary scientific area.
11.Gradation in research proceeding.
12. Objective spatial reality projectioning and modeling.
13. Autonomy of geographical theoretical concept.
14. The meaning of geographical concept on educational levels.
15. Positioning and popularising geography.</td></tr>
<tr><td>2.6.</td><td colspan="2">X lecture
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
X field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
X work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:
This course aims to learn students how to understand geographical theoretical fundaments.</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular class attendance, passed preliminary exam, reserach discussion and independent research issue elaboration.</td></tr>
<tr><td>2.9. Screening student work (name the</td><td>Class attendance</td><td>1</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work		Report		(other)	
	Essay		Seminar essay	1	(other)	
	Tests	0.5	Oral exam		(other)	
	Written exam	0.5	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Class attendance and discussion in research groups, tests, written exam and seminar essay.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Holt-Jensen, A., 2009:*Geography. History and Concepts: A Student's Guide,* Fourth Edition, SAGE, London.	2	yes
	Bonnett, A., *What is Geography?,* SAGE, London.	2	yes
	Šterc, S., 1986: O suvremenom geografskom objektu istraživanja s posebnim osvrtom na demogeografiju, *Geografski glasnik 48,* 99-121.	10	yes
	Šterc, S.,Geografski prostor-objektivna stvarnost ili geografska irealnost?, *Geografski glasnik 51,* 143-154.	10	yes

2.12. Optional literature (at the time of submission of study programme proposal)	Vresk, M., 1997: *Uvod u geografiju. Razvoj, struktura, metodologija,* Školska knjiga, Zagreb. Hubbard, P., Kitchin, R., Bartley, B., Fuller, D., 2002: *Thinking Geographically. Space, Theory and Contemporary Human Geography,* Continuum, London. Minca, C., (ed.), 2001: *Postmodern Geography. Theory and Praxis,* Blackwell Publishers *Ltd,* Oxford.
2.13. Quality assurance methods that ensure the acquisition of exit competences	Among classical ways of student evaluation, independent research works with mentors instruction have been especially evaluated and revolted on the level of potential student involvement in scientific and professional meetings.
2.14. Other (as the proposer wishes to add)	Research tasks have been assigned by students individual choice (associated with their course).

DETAILED PROPOSAL OF THE STUDY PROGRAMME

ELECTIVE COURSES

Table 2. Course description

1. GENERAL INFORMATION			
1.1. Course teacher	Zoran Stiperski	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geographic Aspect of Globalization**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Jelena Lončar	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Understanding the phenomenon of globalization from various aspects, economical, political, social. Considering the processes of globalization that in particular concern Croatia.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	The course contributes to understanding of of the economic and geographic systems and models, development factors and dynamics and structure of the global economy. The course contributes to the development of professional competence in geography science, the development of competence for independent research and creating the foundation for continuing education.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-compare the state of the world according to the degree of their economic development -explain the formation, boundaries and basic features of the global economy -compare state-triad (trinity), analyze and interpret the foundation of their economic power in the world -extract and compare the weaknesses of global periphery (Latin America, Africa and Eastern Europe) -explore, explain and present rise factors of East Asia -the role of international organizations (such as GATT, WTO, IMF, World Bank) on the global economy - position of individual businesses and the local community in globalized world		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 The diversity of countries and economic development 2 Economic systems in the world		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	3 Political and social systems in the world 4 Global economy - formation 5 Global economy - boundaries 6 Global economy - validity 7 The role of GATT, WTO, IMF and World Bank to globalized society 8 Relation between global economy and national state 9 The new global strategy for the business unit and international organizations 10 The importance of natural resources for the global economy (example petroleum) 11 Sources of competitiveness in a global economy 12 Polarization of the world under the influence of globalization (the power of the Trinity: Europe, North America, East Asia) 13 Polarization of the world under the influence of globalization (weaknesses of periphery: Latin America, Africa, Eastern Europe) 14 Polarization of the world under the influence of globalization (new challenges: the BRICS countries) 15 Polarization of the world under the influence of globalization (rise of several cities: financial centers (exchanges, banks), political centers of international importance, the headquarters of multinational organizations)

2.6. Format of instruction:			2.7. Comments:
	X lectures X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia and the internet ☐ laboratory ☐ work with mentor ☐ (other)	

2.8. Student responsibilities	Attending classes and seminars regularly. Written seminar based on individually collected and analyzed literature.

2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
Class attendance	0,5	Research		Practical training		
Experimental work		Report		(other)		
Essay		Seminar essay	0,5	(other)		
Tests		Oral exam	1	(other)		
Written exam	1	Project		(other)		

2.10. Grading and evaluating student work in class and at the final exam	The final grade is determined on the basis of the seminar evaluation, colloquium results, written and oral exams. All elements of evaluation except colloquium must be positive.

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Stiperski, Z., 2014: Internal course materials, *Geographic Aspect of Globalization*,	10	yes

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	Department of Geography, Faculty of Science, Zagreb.		
	Stiglitz, J., 2009: *Uspjeh globalizacije*, Algoritam, Zagreb.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Lechner, F. J., Boli., J. (editor), 2012: The Globalization Reader, Wiley-Blackwell, Malden, Oxford Osterhammel, J., Petersson, N. P., 2005: Globalization – a short history, Princeton University Press, Princeton, Oxford Ritzer, G., 2011: Globalization – the Essentials, Wiley-Blackwell, Malden, Oxford Rowntree, L., Lewis, M., Price, M., Wyckoff, W., 2010: Globalization and Diversity – Geography of a Changing World, Pearson Eitzen, S., Zinn, M. B., 2012: Globalization – The Transformation of Social Worlds, Wadsworth Cengage Learning Dicken, P., 2003: *Global shift*, Guilford Press, N.York, London. Ohmae, K., 2005: *Nova globalna pozornica: izazovi i prilike u svijetu bez granica*, Mate, Zagreb. Thomas L. Friedman, 2003: *Lexus i maslina - Razumijevanje globalizacije*. Izvori. Zagreb. Hill, C. W. L., 2001: *Global Business Today*, McGraw-Hill. Lester C. Thurow, 1997: *Budućnost kapitalizma - Kako današnje gospodarske snage oblikuju sutrašnji svijet*. Mate. Zagreb.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	The procedures listed in the Rule Book and the Manual of Quality Management at the University of Zagreb and the Faculty of Science: - University and college student survey - Self-evaluation of teaching: updating and revising the aims and subjects of course; updating teaching and learning strategies; evaluation of learning outcomes by analyzing students performance based on the personal data and data of the Student Administration Office - Exit polls: evaluation of undergraduate study - Interview with companies, institutions and institutes where students perform their practical work		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dane Pejnović	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Southeast Europe**	1.7. Credits (ECTS)	3
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	45+0+0+0 (3+0+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring knowledge, skills and attitudes about the geographical reality of Southeast Europe		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, skills and abilities:** <u>Knowledge and understanding:</u> Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field.. Appropriate statistics and graphic techniques. Methods in cartography, interpretation of elements and contents of geographical maps. Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. The role of population in processes and functional spatial organization. Urban and rural spatial systems, their interrelationship and structural and functional characteristics. Systems and models in economic geography: structure, dynamics and development factors on various spatial levels. Factors of development and characteristics of transportation modes, transportation networks, dynamics of transportation flows, impacts of relationship of transport and other economic activities. Processes in political geography, with emphasis on globalisation and integration processes. Geographic aspects of socio-cultural processes. Causality relations between the elements and factors of natural environment and society. Concept of region and regionalisation. Modern geography of Croatia and Europe.		

	Concept of regional and sustainable development. **Cognitive, practical and generic skills and abilities:** The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral f Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. Conducting literature research and use databases and other sources of information. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Ability to: - Explain the concepts, approaches and methods of regional geography - Explain the particularities of Southeast Europe in the regional structure of Europe - Explain the heterogeneous spatial structure of Southeast Europe - Explain the causes of delayed state-formation of the Region in the European context - Explain the differences in the structure of population, level of development and spatial organization between states of the Region - Explain the relationships and processes among the peoples and countries of Southeast Europe - Affirm the forms of cooperation that contribute to the European integration process - Affirm an active role of Croatia as a linking factor of regional cooperation in Southeast Europe - Evaluate the educational potential of the course contents
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Introduction - the scientific basis of regional geography 2. Regional specificity of Southeast Europe 3. The geographical position of Regions and European integration processes 4. Fundamental natural geographical features 5. Historical geography of Souteast Europe 6. Political geography of Souteast Europe 7. Contemporary socio-geographical characteristics 8. States of the Eastern Balkans: Romania 9. States of the Eastern Balkans: Bulgaria 10. Countries of the Southern Balkans: Greece

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	11. The Western Balkans: Serbia, Kosovo, Montenegro 12. Western Balkan countries: Albania, Macedonia 13. Western Balkan countries: Bosnia and Herzegovina 14. Crisis areas and prospects of Southeast Europe 15. The position and role of Croatia in Southeast Europe						
2.6. Format of instruction:	X lectures ☐ seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning X field work		☐ independent assignments ☐ multimedia and the internet ☐ laboratory X work with mentor ☐ (other)		2.7. Comments:		
2.8. Student responsibilities	Regular attendance and participation in thematic discussions.						
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance		Research		Practical training		
	Experimental work		Report		(other)		
	Essay		Seminar essay		(other)		
	Tests		Oral exam	2	(other)		
	Written exam	1	Project		(other)		

2.10. Grading and evaluating student work in class and at the final exam	Regularity of attendance and class participation to 10%, 40% written exam, oral exam 50%.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	The completed test materials (script), Zagreb, 2010.	15	yes
	Todorova, M., 1999: *Imaginarni Balkan*. Biblioteka XX vek, 103 (ur. I. Čolović), Beograd, 444 str.	10	yes
	Atlas Europe (urednik: M. Klemenčić), Leksikografski zavod *Miroslav Krleža*, Zagreb, 1997, 644 str.	10	yes
	Natek, K., Natek, M., 2000: *Države svijeta 2000*. Mozaik knjiga, Zagreb, 704 str.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Magaš, D., 2013: *Geografija Hrvatske*, Sveučilište u Zadru, Odjel za geografiju, Meridijani, Zadar-Samobor. Pavić, R., 2008: Europa: zemljopisni sastav i podjela, *Anali Hrvatskoga politološkog društva* 2007., Zagreb, 227-247.		

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	Topalović, D., 2000: *Balkanska Europa: geopolitičke teme*, Diorama, Zagreb, 185 str. Žuljić, S., 1991: Kritički osvrt na neke zaključke i poruke J. Cvijića u njegovim antropogeografskim istraživanjima, *Političko-geografska i demografska pitanja Hrvatske*, Savez geografskih društava Hrvatske, Posebna izdanja, sv. 8, Zagreb, 335-380. Kaplan, D. R., 1993: *Balkan Ghosts: A Journey Through History*, St. Martin's Press, New York. Interpreting the Balkans, *Geographical Intelligence Paper*, No 2, Royal Geographical Society, London, 1995. Carter, W-F. & Norris, T. H., 1996: *The changing shape of the Balkans*, UCL Press. Dictionaries, Encyclopaedias (Croatian and foreign), scientific and professional journals (Croatian and foreign)
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and Faculty of Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dražen Njegač	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of East Asia**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Ivan Šulc	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Knowledge of East Asia as one of the most prosperous areas of the world. Students have to be able to know the meaning and specifics of the East Asian countries in regional and global context and, concerning the trends, to envision their future development.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** Knowledge and understanding of: Modern geography and regional specifics of East Asia. Causality relations between the elements and factors of natural environment and societies of East Asia. Political geography of East Asia, with emphasis on globalisation and integration processes. Applying of methodology in geography and current investigations. **Cognitive abilities and skills:** The ability to interpret and discuss relevant and actual geographic problems and processes in East Asia. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Conducting literature research and use databases and other sources of information. Continuous professional development.		

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<table>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">-to compare the physical-geographic and sociogeographic elements and factors and their causality relations on the continental, regional and country levels
-to explain the population distribution, to analyze the settlement characteristics and economic activities in East Asia in comparison with the Asian continent
-to differentiate urban and rural systems, their structural and functional characteeristics
-to explain the economical-geographic systems and models, development factors, dynamics and structures of the regional and national economies
-to aply the common geographic knowledge to interpret and discuss relevant and actual geographic problems and processes in East Asia
-to apply appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results.
-to develop the skills needed for presenting scientific contents and stances in written and oral form.
-to conduct literature research and use databases and other sources of information.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Physical-geographic characteristics of East Asia.
2. Population of East Asia.
3. Historical-geographic development.
4. Transport-geographic characteristics.
5. Economic geography of East Asia.
6. Modern processes in East Asia.
7. Regions of East Asia.
8. China – part 1.
9. China – part 2.
10. Pacific Rim.
11. Japan.
12. Korean peninsula (North and South Korea).
13. Taiwan.
14. Mongolia.
15. East Asia and globalization.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular class attendance, oral presentation of written essay.</td></tr>
<tr><td>2.9. Screening student work (name the</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
</table>

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proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work		Report		(other)	
	Essay		Seminar essay	0,5	(other)	
	Tests		Oral exam	1	(other)	
	Written exam	1	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	The final grade is based on the written exam, oral exam and written essay. Each component has to be evaluated positively.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	de Blij, H. J., Muller, P. O., Nijman, 2011: *Geography - Realms, Regions and Concepts*, John Wiley&Sons, 15th Edition.	6	yes
	Weightman, B. A., 2002: Drag*ons and Tigers – A Geography of South, East and Southeast Asia*, John Wiley & Sons Inc.	1	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Friganović, M., 1970: *Japan – zemlja gdje sunce izlazi*, Školska knjiga, Zagreb. Friganović, M., 1978: *Narodna Republika Kina*, Školska knjiga, Zagreb. Friedmann, J., 2005: *China's Urban Transition*, University of Minnesota Press. Rowe, P. G., 2005: *East Asia Modern – Shaping the ContemporaryCity*, Reaktion Books. Zhao Songqiao, 1994: *Geography of China – Environment, Resources, Population and Development*, John Wiley & Sons inc. P. P. Karan, K. Stapleton (ed.): *The Japanese City*, The University Press of Kentucky, 1997. *Geography of Japan*, Teikoku-Shoin, 1980. *Korea, The Land and People*, Kyohaksa, 2000. Der Neue Fischer Weltalmanach.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Laura Šakaja	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Anglo-America**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Lana Slavuj Borčić	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring knowledge of spatial aspects of recent social, economic and political processes in the United States and Canada. Seminar, that will be based on the statistical analysis of data on population, cities, economy and trade of the United States and Canada, will enable students to apply knowledge gained during study process and to map geographic data. It will also provide insight into North American contemporary data sources and databases.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Elements and factors in physical geography and their interrelationship on various spatial levels. Factors and consequences of the spatial distribution of population, settlements and economic activities in North America Urban and rural spatial systems in North America, their interrelationship and structural and functional characteristics Systems and models in economic geography, their structure, dynamics and development factors on various spatial levels. **Cognitive, practical and generic abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. Ability to present knowledge and understanding of concept of regional geography Ability to transfer scientific knowledge on North Ameica into education contents The skills needed for evaluation, interpretation and synthesis of relevant information Conducting literature research and use databases and other sources of information.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">Knowing and understanding the specificity of territorial development the U.S. and Canada
Ability to assess the role of various factors of the economic growth and social progress in the United States and Canada
Ability to detect and analyze push and pull factors of international migration flows
Ability to explain the factors of economic development of the United States and Canada
Knowing and understanding of the US state structure and electoral system
Knowing and understanding of the origin and essence of contemporary neoliberalism
Ability to explain regional differences in North America</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Territory and political borders of the United States and Canada
2-3. Natural regions and their factors
4. Climatic features of North America
5.History of colonization and territorial expansion. Development of structure of settlements.
6. History of international migration. Contemporary immigration flows. Multiethnic mosaic. Demographic features.
7. Population distribution and internal Migration
8. U.S. state structure, electoral system and foreign policy
9 -12. Economy: resources, agriculture, industry, transport
13-15. Cultural regions of the U.S. and Canada.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Class attendance, written seminar essay.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>0,5</td><td>Oral exam</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>0,5</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Class attendance (lectures and seminars), quality of seminar essay, multimedial presentation of seminar essay, written and oral exams.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Title	Number of copies in the library	Availability via other media
2.11. Required literature (available in the library and via other media)	Getis, A., Getis, J., Quastler, I., 2000: *United States and Canada: The Land and People,* McGraw-Hill Science.	2	yes
	Birdsall, S. S., Florin, J., 1998: An Outline of American Geography. Regional Landscapes of the United States, USIA. (http://beijing.usembassy-china.org.cn/uploads/images/tRfkvByOz2SpJ4Nw8NAM5g/outline_of_us_geography.pdf)	-	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Agnew, J., Smith, J. (eds), 2002: *American Space/American Place: Geographies of the Contemporary United States;* London: Routledge, selected chapters. McKnight, T. L., 2003: *Regional Geography of the United States and Canada*., Prentice Hall. Birdsall, S. S, Palka, E. J., Malimowski, J. C., Price, M. L., 2005: *Regional Landscapes of the United States and Canada.*John Wiley & Sons, Inc. Hardwick, S. W., Shelley, F. M., Holtgrieve, D. G., 2008: *The Geography of North America: environment, political economy and culture.* Upper Saddle River: Prentice Hall.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Sanja Faivre	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Latin America**	1.7. Credits (ECTS)	3
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The course objectives are: acquiring knowledge from the field of regional geography of Latin America, its physical-geographical and socioeconomic properties and familiarising with the regional division of the area; developing professional competences from the main field of geography; developing competences for the autonomous research and the basis for working in the field of education.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Bachelors of geography operate with:** <u>Knowledge and understanding of:</u> Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. The role of population in processes and functional spatial organization. Urban and rural spatial systems. Systems and models in economic geography. Factors of development and characteristics of transportation modes, transportation networks, dynamics of transportation flows, impacts of relationship of transport and other economic activities. Processes in political geography, with emphasis on globalisation and integration processes. Geographic aspects of socio-cultural processes. Causality relations between the elements and factors of natural environment and society. Concept of region and regionalisation.. Concept of regional and sustainable development.		

	Cognitive abilities and skills: The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-Understand and explain geographical position, meaning and delimiting Latin America -Explaining physical-geographical elements and factors and their interrelation and geosystem at the level of the continent, particular region and country, -Explaining causes and consequences of the population distribution, explaining the properties of settlements and economic activities in Latin America, -Differentiating urban and rural spatial systems, their structure and functional meaning, -Interpret economic-geographical systems and models, factors of development, dynamics and structure of the economy at the national, regional level and at the level of the continent. -Explaining historical-geographical development and actual geographical properties of Latin America -Apply general geographical knowledge in defining and solving spatial problems in Latin America -Developing skills needed for evaluation, interpretation and synthesis of relevant information.
2.5. Course content broken down in detail by weekly class schedule (syllabus)	COURSE CONTENT: 1.Introduction – defining the geographical Realm. Regions of the Realm. 2.Physical geography: 2.1.Shape and natural characteristics 2.2.Geological properties, 2.3.Relief,

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">2.4.Climate,
2.5.Hydrogeographical properties,
2.6.Natural regions.
3.Historical Aspects.
4.Population patterns. Latin American City.
5.Economic patterns.
6.Politics and territory.
7.Regional division.
8.Croatian diaspora in Latin America.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular attendance to courses and making seminar in a written form with oral presentation</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0.5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>2.5</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td></td><td colspan="5"></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">The grade at the final exam is defined on regularity of attendance to courses, on evaluation of the seminar quality and written exam.</td></tr>
<tr><td rowspan="5">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Faivre, S., 2010: Internal script, Geography of Latin Ameica, PMF, GO, Zagreb</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3">Clawson, D. L., 2006: Latin America & the Caribbean, McGraw Hill, str.422.</td><td>5</td><td>yes</td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td colspan="3"></td><td></td><td></td></tr>
<tr><td>2.12. Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Blouet, B. W., Blouet, O.M., 2010: Latin America and the Caribbean: A Systematic and Regional Survey, 6th Edition, Wiley.
de Blij, H. J., Muller, P. O., 2011: Geography - Realms, Regions and Concepts, John Wiley&Sons, 15th Edition.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Bradshow, M., Dymond, J., White, G., Chacko, E., 2007: *World Regional Geography*, McGraw Hill, New York.
2.13. Quality assurance methods that ensure the acquisition of exit competences	Procedures set forth in the Regulations book and the Reference manual on quality management at the University of Zagreb, and at the Faculty of Science: - student questionnaire at the University and Faculty level -auto evaluation of courses: modernisation and revision of aims and content of the course, the strategy of teaching and learning; evaluation of learning outcome by the analysis of student success based on the Student office and our own records -questionnaire after exit of the University: evaluation of Graduate Education Programme
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Anita Filipčić	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Australia and Oceania**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Mladen Maradin	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The main learning objective is to define the geographical speciallities of Australia and Oceania. One must determine the actual importance of Australia in the global world and the characteristics of economic development. The course helps students to detect the differences between Australia and other megaregions and to determine the positive and the negative components of these differences.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	Developing of cognitive, practical and generic abilities and skills: knowing and understanding the regional specifities and global world, getting the professional competencies of core science and the research work competencies.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowing, understanding and independent explanation of geographical position of Australia nad Oceania, phases of settlement, elements and factors of physical geography and their interactions, the continental, regional and country geosystems. Knowing, understanding and independent explanation of physical geography influence on population distribution, settlement features, economic activities and area valorisation. Knowing, understanding and independent explanation of demographic features and settlement politics Knowing, understanding and independent explanation of urban and rural spatial systems, their structure and functiions. Knowing, understanding and independent explanation of economic geographical systems and models, developing factors, dynamics and structure of continental, regional and national economies. Knowing, understanding and independent explanation of New Zealand and Oceania features, as well as the importance of Australia and Oceania for global economy. Developing of skills needed for independent logging data, evaluation, explanation and synthesis of relevant informations.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Developing of skills needed for presentation of scientific work, written and oral briefing.
Application of appropriate statistic and graphic methods for analysis and presentation of research work.
Developing of skills needed for independent databases use nad literature research.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Geographical position of Australia and Oceania. Geographical peripheral quality and isolation.
2. The settlement of Australia and Oceania.
3. Relief of Australia and Oceania. The relief development and relief units.
4. The influence of the relief on the demographic and economic development.
5. The climate and waters of Australia.
6. The climate influence on space valorization. Drought in Australia.
7. Population of Australia. The immigration politics.
8. The basic demographic indicators. The Croats in Australia and New Zealand.
9. The australian cities – the space concentrating role.
10. The australian economy. The phases in economic development.
11. The relations of australian and asian economies. The economic importance of Australia in the global world.
12. New Zealand – similarities and differences to Australia and the rest of Oceania.
13. Population and cities of New Zealand
14. The New Zealand economy.
15. Oceania – specifities and geographical problems.</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Class and presentations attendance. Writing and presentation of seminar paper.</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0.25</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0.50</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>2.25</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td></td><td colspan="5"></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Attendance and active contribution to class, seminar writing and presentation, written exam.</td></tr>
<tr><td>2.11. Required literature (available in the</td><td colspan="4">Title</td><td>Number of</td><td>Availability via</td></tr>
</table>

library and via other media)		**copies in the library**	**other media**
	Šegota, T., Filipčić, A., 2004: *Geografija Australije i Oceanije*. Udžbenici Sveučilišta u Zagrebu.II. dopunjeno i izmijenjeno izdanje. Meridijani, Samobor.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Moran, A., 2005: *Australia. Nation, Belonging, and Globalization*. Routledge, New York. Hobbs, J. J., 2007: *Fundamentals of Wold Regional Geography*. Thomson Brooks/Cole, Belmont. Johnson, D. L. et al, 2010: *World Regional Geography*. Prentice Hall, New York.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dražen Kurtanjek	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Mineralogy and Petrology**	1.7. Credits (ECTS)	3
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+0+15+0 (2+0+1+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Learn the basic concepts and principles of mineralogy and petrology. Obtaining information about origin, properties and use of minerals and rocks.Developing skills (on the field and in the laboratory) of determination of minerals and rocks. Developing critical evaluation of mineralogy and petrology and its role in science and overall education.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** Geological terminology, definitions and theories. Applying of methodology in geology and current investigations in its field. **Cognitive, practical and generic abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geological problems and processes. Orientation in space with modern technologies and other skills needed in fieldwork. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning	Students should be capable to: explain and describe internal order in crystals as well as crystal morphology; define and determine chemical and physical properties of minerals (identify and systematize); distinguish the main rock types and varieties		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td>outcomes)</td><td colspan="6">inside of each group and explain their origin.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">- Introduction (opening remarks, organization of teaching, course program); definiton of mineral and mineralogy;history of mineralogy
- Crystallography – internal order in crystals, crystal lattice, Bravais lattices
- Atoms, ions, molecules as building elements of crystal lattice, bonding forces in crystals, crystallization
- Crystal structure; coordination number; coordination polyhedron; atomic and ionic size
- Crystal habit; crystal sistems; symmetry elements; crystal classes
- Chemical properties of minerals (composition, isomorphism, polimorphism); mineraloids
- Physical properties of minerals (hardness, tenacity, specific gravity, cleavage, fracture, color luster, thermal, electrical and magnetic properties)
- Systematization of minerals
- Igneous rocks – introduction; Earths interior; origin and composition of magma; plate tectonics
- Texture and structure of igneous rocks; stages of crystallization of magma, compositon and classification of igneous rocks
- Sedimentary rocks – introductin; sedimentary cycle (weathering; erosin, transportation, deposition, lithifaction)
- Texture and structure of sedimentary rocks; composition and classification of sedimentary rocks (clastic sediments, biogenic and organic sediments, chemical sediments, volcanoclastic sediments, residual sediments)
- Metamorphic rocks – introduction; factors controlling the metamorphic processes (pressure, temperature, chemically active fluids); types of metamorphism
- Composition and classification of metamorphic rocks; metamorphic facies
- identification methods of minerals and rocks</td></tr>
<tr><td rowspan="2">2.6. Format of instruction:</td><td colspan="3">X lectures
☐ seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular attendance; mid-exams, independent assignments.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>1</td><td>Oral exam</td><td>2</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td></td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student</td><td colspan="6">Mid-exams, final exam.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

work in class and at the final exam			
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Vrkljan, M., 2012: *Uvod u mineralogiju i petrologiju,* RGNF, Zagreb.	5	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Thompson, G. R. & Turk, J., 2007: *Earth Science and the Environment*. Harcout Brace College Publishers, Orlando. Plummer, C. C., McGeary, D., Carlson, D. H., 2003: *Physical Geology*. McGgraw-Hill Higher Education, New York Klein, C., 2002: *Mineral Science*. John Wiley & Sons, Inc., New York. Tucker, M. E., 2008: *Petrologija sedimenata. Uvod u postanak sedimentnih stijena*. Azp grafis, Samobor.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	- university polls of students - self-evaluation of teaching: updating and revising the objectives and contents of the course and updating and revising of teaching and learning strategy - exit polls: evaluation of graduate study - interview with companies, institutions and institutes where students perform their practical work - polls ater first year of employment (monitoring of employments ater graduation)		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Anita Filipčić	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Regional Climatology**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Mladen Maradin	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The main learning objective is to study the causes and effects of climatic differences between different latitude, as well as the climate characteristic of the continents. Thus the students can reveal the consequences of climatic differences. It is important to take into consideration the processes responsible for the present climate and actual processes responsible for future climate.		
2.2. Course enrolment requirements and entry competences required for the course	Passed course: Climatology.		
2.3. Learning outcomes at the level of the programme to which the course contributes	Developing of cognitive, practical and generic abilities and skills: knowing and understanding regional climatic features, knowing and understanding he climate influence on other geographic elements, getting and developing of competencies needed for research work.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowing, understanding and independent explanation the causes of regional climatic features. Knowing, understanding and independent explanation of geographical consequences of climatic features. Knowing, understanding and independent explanation of climatic features of each continent. Knowing, understanding and independent explanation climatic features in the low, middle and high latitude. Knowing, understanding and independent explanation climatic characteristic of Croatia Knowing, understanding and independent explanation of recent climatic change.		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. The regional climate: microclimate, local climate, mesoclimate, macroclimate. 2. The empiric and genetic classifications. Koepopen's and Thornthwait's classification. 3. Tropical climates 4. Deforestation and desertification 5. The mid-latitude climates 6. Polar climates		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">7. The climates of the continents. The climate of Europe
8. The climate of Asia
9. The climate of North America
10.The climate of South America
11. The climate of Africa
12. The climate of Australia
13. The climate of Croatia
14. The global influences and the local changes
15. The recent climate change</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Class and presentations attendance, writing and presentation of a seminar paper.</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0.25</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0.50</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>2.25</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td></td><td colspan="5"></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Attendance and active contribution to class, seminar writing and presentation, written exam.</td></tr>
<tr><td rowspan="4">2.11. Required literature (available in the library and via other media)</td><td colspan="4">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="4">Hidore, J. J. et al, 2010: Climatology. An Atmospheric Science. Prentice Hall, New Jersey.</td><td>3</td><td>yes</td></tr>
<tr><td colspan="4">Rohli R. V., Vega, A. J., 2012: Climatology. Jones & Bartlett Learning, Sudbury.</td><td>3</td><td>yes</td></tr>
<tr><td colspan="4"></td><td></td><td></td></tr>
<tr><td>2.12. Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Bridgman, H. A., Oliver, J. E., 2006: The Global Climate System.Patterns, Processes, and Teleconnections. Cambridge University Press, Cambridge.

Filipčić, A., 1996: Klimatologija u nastavi geografije. Hrvatski zemljopis i Nakladnička kuća „Dr. Feletar“, Zagreb.</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Dražen Njegač	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Urban systems of the world**	1.7. Credits (ECTS)	3
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Adoption of the general knowledge of the urban systems of the world, their differences and development. Students have to know the methods for the analysis and the characteristics of the world's urban systems, the development phases and regional specifics of the urban systems as well as the cultural-genetic characteristics of the cities, the development of the urban systems under influence of the European integration and the global urban system. They have to be able to apply the theoretic models and use the statistic and cartographic methods for analyzing spatial, hierarchical and temporal specifics of the urban systems of the world.		
2.2. Course enrolment requirements and entry competences required for the course	Attended classes of Urban Geography.		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Urban systems, their structural and functional characteristics. Causality relations between the elements and factors of natural environment and society. Applying of methodology in geography and current investigations in its field. **Cognitive abilities and skills:** The ability to interpret and discuss relevant and actual urban-geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:**		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="3">Skills needed in fieldwork.
Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results.

Generic abilities and skills:
Problem solving, relating to qualitative and quantitative urban-geographic information.
Conducting literature research and use databases and other sources of information.
Continuous professional development.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="3">-to define the notion and explain the characteristics of the urban systems of the world
-to apply the methods for the analysis of the urban systems
-to identify the phases of the urban systems development on the local, national and global levels
-to explain and compare regional specifics of the development of the urban systems and the cultural-genetic characteristics of the cities</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="3">1. Notion and characteristics of the urban systems.
2. Methods for the analysis of the urban systems.
3. Phases of the urban systems development.
4. Regional specifics of the development of the urban systems.
5. Cultural-genetic characteristics of the cities.
6. Development of the urban systems of Europe Part 1.
7. Development of the urban systems of Europe Part 2.
8. Development of the urban systems of Orient.
9. Development of the urban systems of Africa.
10. Development of the urban systems of Asia.
11. Development of the urban systems of Latin America.
12. Development of the urban systems of Angloamerica and Australia.
13. Development of the urban systems of Croatia.
14. Urban system and European integration.
15. Global urban system.</td></tr>
<tr><td>2.6. Format of instruction:</td><td>X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td>☐ independent assignments
☐ multimedia and the internet
☐ laboratory
X work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.8. Student responsibilities	Regular class attendance, oral presentation of written essay.					
2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,5	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay	0,5	(other)	
	Tests		Oral exam	1	(other)	
	Written exam	1	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	The final grade is based on the written exam, oral exam and written essay. Each component has to be evaluated positively.					

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Vresk, M., 2002: *Razvoj urbanih sistema u svijetu – geografski pregled*, drugo prerađeno izdanje, Školska knjiga, Zagreb.	10	yes
	Brunn, S. D., Hays-Mitchell, M., Zeigler, D. J. (ed.), 2011: *Cities of the World – World Regional Urban Development*, 5th ed., Rowman & Littefield.	3	yes

2.12. Optional literature (at the time of submission of study programme proposal)	Pacione, M., 2001: *Urban Geography – a global perspective*, Routledge. Taylor, P. J., 2004: *World City Network – a global urban analysis*, London. Brenner, N., Keil, R. (ed.), 2006: *The Global Cities Reader*, Routledge.
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	-

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Borna Fuerst-Bjeliš	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Mediterranean**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Marin Cvitanović	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring fundamental knowledge of the concept, significance and space of the Mediterranean as a region /place. Discussing the identity elements. Understanding of the Mediterranean as a link of continents and cultures. Acquiring fundamental knowledge of the environment, processes of degradation and natural and environmental risks; elements of cultural heritage. Developing particular cognitive, practical and generic abilities and skills: applying knowledge in determining, defining and solving spatial problems of medium-level complexity, skills needed for evaluation, interpretation and synthesis of relevant information, skills needed for presenting scientific contents and stances in written and oral form.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	Professional knowledge, abilities and skills: causality relations between the elements and factors of natural environment and society at the regional level; understanding of causal relations of dominant degradation processes and formation of cultural landscapes as the outcomes of millennial man-environment interactions in Mediterranean.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Understanding of the uniqueness of the Mediterranean as a consequence of linking the different cultures in the unifying conditions of environment and life rhythms'. Knowing and understanding the uniqueness of the environment. Knowing and understanding the causal relations of dominant degradation processes and formation of cultural landscapes as the outcomes of millennial man-environment interactions in Mediterranean. Recognition of the cultural landscape (and heritage) elements and its significance for the economy and development (tourism).		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1. Concept of the Mediterranean. Significance and identity. 2. Unity and fragmentation. 3. Inner divisions and conceptualization. Regional divisions. Eumediterranean unity.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">4. European and African-Asian links
5. Adriatic in the Mediterranean.
6. Geopolitical themes of the Mediterranean
7. Geological evolution of the Mediterranean.
8. Earthquakes, volcanism
9. Mediterranean climate
10. Mediterranean vegetation
11. Mediterranean vegetation of Croatia
12. Degradation, desertification and risks
13. Mediterranean and Adriatic seas
14. Adriatic hydrological system. Islands
15. Cultural landscapes and urban heritage of the Mediterranean</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="2">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Working and completion of project /assignment; working and discussing the selected texts/articles; completion of tests and written exam.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>1</td><td>Oral exam</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>1</td><td>Project</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">Final evaluation is the result of: two tests completed; completed project and final written exam.</td></tr>
<tr><td rowspan="3">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Conti, S., Segre, A., (eds.),1998: Mediterranean Geographies, Societa Geografica Italiana, CNR, 359.</td><td>2</td><td>yes</td></tr>
<tr><td colspan="3">Hughes, J. D., 2005: The Mediterranean, An Environmental History, ABC CLIO, Santa</td><td>2</td><td>yes</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	Barbara, Denver, Oxford, 333		
	King, R., De Mas, P., Mansvelt Beck, J., (eds.), 2001: *Geography, Environment and Development in the Mediterranean,* Sussex Academic Press, Brighton, Portland, 291.	2	yes
	Matić, S. (ur.), 2011: *Šume hrvatskog Sredozemlja*, Akademija šumarskih znanosti, Zagreb, 740.	10	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Woodward, J. (ed.), 2009: *The Physical Geography of the Mediterranean*, Oxford Regional Environments, Oxford University Press, 663. Mazzoleni, S., di Pasquale, G., Mulligan, M., di Martino, P., Rego, F., (eds.),2005: *Recent Dynamics of the Mediterranean Vegetation and Landscape*, Wiley, 306. Grove, A. T., Rackham, O. (eds.), 2001: *The Nature of Mediterranean Europe, An Ecological History*, Yale University Press, New Haven, London, 384.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule Book and the Manual of quality management of the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)	-		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Laura Šakaja	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Russia**	1.7. Credits (ECTS)	3
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Acquiring knowledge of spatial aspects of recent social, economic and political processes in Russia. Understanding the post-socialist transition process and the new geopolitical developments in the post-Soviet era. Seminar essay will contribute to the ability to conduct synchronic and diachronic analysis, to apply knowledge gained during study process and to map geographic data.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	**Professional knowledge, abilities and skills:** <u>Knowledge and understanding of:</u> Elements and factors in physical geography and their interrelationship on various spatial levels. Factors and consequences of the spatial distribution of population, settlements and economic activities in Russia Urban and rural spatial systems in Russia, their interrelationship and structural and functional characteristics Systems and models in economic geography, their structure, dynamics and development factors on various spatial levels. **Cognitive, practical and generic abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. Ability to present knowledge and understanding of concept of regional geography Ability to transfer scientific knowledge on Russia into education contents The skills needed for evaluation, interpretation and synthesis of relevant information Conducting literature research and use databases and other sources of information.		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results.</td></tr>
<tr><td>2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">Knowing, understanding and explaining the factors that determined the historical and geographical development of the Russian state
Knowing and understanding the new trends in the development of Russia in post-socialist period
Ability to explain the cultural diversity of the Russian Federation
Ability to allocate and interpret RF foreign policy guidelines
Ability to evaluate the role of Russian Federation in the global geopolitical order and the global economy
Knowing and understanding the processes of formation of economic regions of the Russian Federation
Ability to explain regional differences in Russian federation.</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Territory and political borders of Russian federation
2 -3. Natural regions and their factors
4. History of colonization and territorial expansion
5. Ethnic and religious mosaic of Russia. Population structure
6. Population distribution and internal migration
7. Post-socialist transition and the Russian economy. Developmental resources.
8-9. Russian economy in the post-industrial environment: industry, agriculture, transport.
10. Urbanization process and cities.
11. Economic regions and the administrative-territorial structure of the Russian Federation
12-14. Regional overview of the Russian Federation
15. Problems and prospects in Russian foreign policy and international relations</td></tr>
<tr><td rowspan="2">2.6. Format of instruction:</td><td colspan="2">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
X multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.7. Comments:</td></tr>
<tr><td colspan="4"></td><td colspan="2"></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attendance to class, completed seminar essey.</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>0,5</td><td>Oral exam</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>0,5</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td colspan="6"></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the</td><td colspan="6">Class attendance (lectures and seminars), quality of seminar essay, presentation of seminar essay, written and oral exams.</td></tr>
</table>

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final exam			
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Blinnikov, M. S., 2011: *A Geography of Russia and its Neighbors*, The Guilford press, New York.	5	yes
	De Blij, H. J., Muller, P.O., 2005: *Concepts and Regins in Geography*, John Wiley & Sons, Inc, Chapter 2. Russia.	5	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Kort, M. G., 2004: *Russia,* Infobase Publishing. Trenin, D., 2002: *The End of Eurasia: Russia on the Border Between Geopolitics and Globalization,* Carnegie Endowment for International Peace. Berglöf, E., Kunov, A., Shvets, J., Yudaeva, K., 2003: *The New Political Economy of Russia*. Cambridge: The MIT Press.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Zoran Stiperski	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Asia**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Jelena Lončar	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Understanding the important geographic processes in Asia. Enroling with diversity in Asia.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	The subject contributes to understanding physical systems, processes and diversity in Asia. The course contributes to the development of professional competence in geography science, the development of competence for independent research and creating the foundation for continuing education.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-explore the development of the population in Asia -compare the relation between the core and the periphery in Asia -explore the characteristics of economic development of Asia -explore geographic features of Asian regions -compare the different colonial experiences in Asia -investigate the problem areas of Asia		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 Natural geographic characteristics of Asia: relief, climate, vegetation 2 Natural risks, environmental threats, natural resources 3 Population, migration, languages, religions of Asia 4 The issue of cities and urbanization Asia 5 Historical Overview of Asia 6 Core and periphery in Asia 7 Civilization, cultural circles and spatial identities in Asia		

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	8 Differences in economic development in Asia 9 The main geographical features of the Asian region 10 Southwest Asia: regional division, natural features, the impact of oil on the local society 11 South Asia: regional division, colonial transformation of India, Hindu-Muslim friend 12 Southeast Asia: regional division, the colonial sphere, multicultural state, side impact 13 East Asia: regional division, the impact of Japan and China, Japanese colonialism, the rise of China 14 The political geography of Eurasia: The Eurasian Balkans, the Caucasus and Turkestan issue, Middle East 15 The political geography of Eurasia: China's strategic moves, the vulnerability of Japan, the issue of Taiwan and North Korea, position of Mongolia

2.6. Format of instruction:	X lectures X seminars and workshops ☐ exercises ☐ on line in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia and the internet ☐ laboratory ☐ work with mentor ☐ (other)	2.7. Comments:

2.8. Student responsibilities	Attending classes and seminars regularly. Written seminar based on individually collected and analyzed literature.

2.9. Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0,5	Research		Practical training	
	Experimental work		Report		(other)	
	Essay		Seminar essay	0,5	(other)	
	Tests		Oral exam	1	(other)	
	Written exam	1	Project		(other)	

2.10. Grading and evaluating student work in class and at the final exam	The final grade is determined on the basis of the seminar evaluation, colloquium results, written and oral exams. All elements of evaluation except colloquium must be positive.

2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Stiperski, Z., 2014: *Geography of Asia*, Internal course materials, Department of Geography, Faculty of Science, Zagreb.	10	yes
	Barbara A. Weightman, 2002: *Dragons and Tigers: geography of South, East and Southeast Asia*, John Wiley and Sons.	5	yes

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2.12. Optional literature (at the time of submission of study programme proposal)	Huang, Y., Bocchi, A. M., 2008: *Reshaping Economic geography in East Asia*, World Bank Publication.
2.13. Quality assurance methods that ensure the acquisition of exit competences	The procedures listed in the Rule Book and the Manual of Quality Management at the University of Zagreb and the Faculty of Science: - University and college student survey - Self-evaluation of teaching: updating and revising the aims and subjects of course; updating teaching and learning strategies; evaluation of learning outcomes by analyzing students performance based on the personal data and data of the Student Administration Office - Exit polls: evaluation of undergraduate study - Interview with companies, institutions and institutes where students perform their practical work
2.14. Other (as the proposer wishes to add)	

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Zoran Stiperski	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Introduction to Japanese Studies**	1.7. Credits (ECTS)	3
1.3. Associate teachers	Jelena Lončar	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Understanding of important geographical and social processes in Japan, the third largest economy in the world. Another goal is to understand the mentality of the Japanese population and the impact that it has on economic development. This causally relation (the effect of mentality of the population on economic development) is an example that can be applied to other countries.		
2.2. Course enrolment requirements and entry competences required for the course			
2.3. Learning outcomes at the level of the programme to which the course contributes	The subject contributes to understanding geographical and social processes in Japan. The course contributes to the development of professional competence in geography science, the development of competence for independent research and creating the foundation for continuing education.		
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	-exploring causes of forming mentality of Japanese population in the context of natural environment, geography, historical heritage, social structure and current events -understand the impact of mentality of the population on economic development on the example of Japan -explore the connection between poor natural bases and high economic development -understand the political system of Japan -explore the role of Kaizen management in the economic success of Japan -explore the position of Japan in globalized world		
2.5. Course content broken down in detail by weekly class schedule (syllabus)	1 Economic potential of Japan 2 Social Development Index of Japan 3 The influence of APEC Organization (Asia-Pacific economic cooperation) on Japan		

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">4 The influence of the natural environment and geography position on the economic development of Japan
5 Natural resources of Japan and dependence on import
6 Japan's natural disaster and social adjustment
7 The impact of historical heritage in shaping the mentality of Japanese population
8 Historical stages of the Japan, since isolation of Japan, the Meiji Restoration and imperialism to the postwar period
9 Impact of the Japanese community in the economic system
10 The influence of Japanese religions in shaping the mentality of the population
11 Japanese political system: emperor, governments, political parties
12 Japanese economic system: development stages
13 Basics of Kaizen management - an example of understanding the secrets of Japan's economic success and the mentality of the population
14 Japan's Foreign Policy: neutrality against the alliance with the U.S., trade and economic dependence
15 Recent trends in Japan: economic stagnation, participation in the new world order in the 21st century</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Attending classes and seminars regularly. Written seminar based on individually collected and analyzed literature.</td></tr>
<tr><td rowspan="6">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,5</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>1</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>1</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2.10. Grading and evaluating student work in class and at the final exam</td><td colspan="6">The final grade is determined on the basis of the seminar evaluation, colloquium results, written and oral exams. All elements of evaluation except colloquium must be positive.</td></tr>
<tr><td rowspan="3">2.11. Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Stiperski, Z., 2014: Introduction to Japanese Studies, Internal course materials, Department of Geography, Faculty of Science, Zagreb.</td><td>10</td><td>yes</td></tr>
<tr><td colspan="3">Stiperski, Z., Yamamoto, Y., Njavro, Đ., 2005: Samuraj i vitez. Kako se Japan uspio</td><td>10</td><td>yes</td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

	ekonomski razviti – Hrvatski put prema uspjehu. Meridijani-Japanski centar Zagrebačke škole ekonomije i managementa. Samobor-Zagreb. 145		
2.12. Optional literature (at the time of submission of study programme proposal)	Calichman, R., 2005: *Contemporary Japanese Thought*, Columbia University Press. Karan, P. P., Kristin Stapleton (ed.), 2007: *The Japanese City*, The University Press of Kentucky. Devide, V., 2007: *Japan*, Školska knjiga; Zagreb.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	The procedures listed in the Rule Book and the Manual of Quality Management at the University of Zagreb and the Faculty of Science: - University and college student survey - Self-evaluation of teaching: updating and revising the aims and subjects of course; updating teaching and learning strategies; evaluation of learning outcomes by analyzing students performance based on the personal data and data of the Student Administration Office - Exit polls: evaluation of undergraduate study - Interview with companies, institutions and institutes where students perform their practical work		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Ružica Vuk	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Africa**	1.7. Credits (ECTS)	3
1.3. Associate teachers	-	1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	Application of knowledge and skills acquired in the basic/fundamental geographic courses on the area of Africa. Getting to know and interpret contemporary natural geographical features and social development of the continent, the impact of historical-geographical development on present relations and problems of the continent, the position and significance of the continent in the contemporary geopolitical and economic relations.		
2.2. Course enrolment requirements and entry competences required for the course	-.		
2.3. Learning outcomes at the level of the programme to which the course contributes	The course *Geography of Africa* contributes to the acquisition of professional competences in geography science, to the development of cognitive, practical and generic abilities and skills for further education, competences for independent research work and acquiring the vocation of Bachelor of geography. **Professional knowledge, abilities and skills** <u>Knowledge and understanding of:</u> Geographic terminology, definitions and theories. Methodology application in geography and current investigations in its field. Elements and factors in physical geography and their interrelationship in geosystems at the continental level. The role of population in processes and functional spatial organization in Africa. Urban and rural spatial systems, their interrelationship and structural and functional characteristics. Systems and models in economic geography, their structure, dynamics and development factors at the continental level. Factors of development and characteristics of transportation modes, transportation networks, dynamics of transportation flows,		

	impacts of relationship of transport and other economic activities in Africa. Processes in political geography, with emphasis on globalisation and integration processes at the continental and regional level. Causality relations between the elements and factors of natural environment and society in different countries and regions of Africa. **Cognitive abilities and skills**: Applying knowledge in determining, defining and solving spatial problems of medium-level complexity in Africa. The ability to interpret and discuss relevant and actual geographic problems and processes in Africa. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills**: Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills**: Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing this course and passing the exam, students will (be able to): - know and understand the geographic location and the position of Africa, elements and factors in physical geography and their interrelationship in geosystems at the continent level, and at the level of various regions and countries of Africa - interpret the causes and consequences of population distribution, settlement characteristics and economic activities in Africa - distinguish urban and rural spatial systems, their structural and functional features - explain systems and models in economic geography, their structure, dynamics and development factors at the continental level - explain the particularities of regional and national economies - know, understand and independently interpret geographical aspect of socio-cultural processes in Africa, historical-geographical development and contemporary geographical features of Africa

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td></td><td colspan="6">- analyze processes in political geography, with emphasis on globalisation and integration processes at the continental and regional level
- interpret causality relations between the elements and factors of natural environment and society in different countries and regions of Africa
- apply cognitive, practical and generic abilities and skills in the analysis and presentation of research results</td></tr>
<tr><td>2.5. Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">1. Geographical features of the continent
2. Natural-geographic features as a factor of the colonization and settlement, and economic exploitation of the continent
3. Historical-geographical development of Africa
4. Contemporary geographical problems and processes in Africa
5. Processes of colonization
6. Decolonization of Africa
7. Population of Africa
8. Economy of Africa
9. Northeast Africa
10. Northwest Africa
11. West Africa
12. East Africa
13. Equatorial Africa
14. South Africa
15. The Republic of South Africa</td></tr>
<tr><td>2.6. Format of instruction:</td><td colspan="3">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
☐ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="6">Regular attendance to courses and making seminar in a written form with oral presentation.</td></tr>
<tr><td rowspan="5">2.9. Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,3</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td>(other)</td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,3</td><td>(other)</td><td></td></tr>
<tr><td>Tests</td><td>0,9</td><td>Oral exam</td><td>0,6</td><td>(other)</td><td></td></tr>
<tr><td>Written exam</td><td>0,9</td><td>Project</td><td></td><td>(other)</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

2.10. Grading and evaluating student work in class and at the final exam	Regular class attendance, active participation in class, quality of paper production and presentation in accordance to agreed elements and criteria are being evaluated. The grade on the final exam is defined according to students' achievements in class, seminar paper, two midterm exams (or on the written test), and the oral exam.		
2.11. Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Vuk, R., 2014: *Geography of Africa*, Internal course materials, Department of Geography, Faculty of Science, Zagreb.	10	yes
	de Blij, H. J., Muller, P. O., 2011: *Geography - Realms, Regions and Concepts*, John Wiley&Sons, 15th Edition.	5	yes
	Crkvenčić, I., 1990: *Geografija Afrike*, Školska knjiga, Zagreb.	10	yes
	Vintar Mally, K., 2012: *Geografija Podsaharske Afrike*, Univerza v Ljubljani, Filozofska fakulteta.	5	yes
2.12. Optional literature (at the time of submission of study programme proposal)	Bradshow, M., Dymond, J., White, G., Chacko, E., 2007: *World Regional Geography*, McGraw Hill, New York. Mahajan, V., 2010: *Afrika u usponu*, Mate d.o.o., Zagreb. Stock, R., 2004: *Africa South of the Sahara*, Guilford. Calvocoressi, P., 2003: *Svjetska politika nakon 1945.*, Nakladni zavod Globus, Zagreb. Natek, K., Natek, M., 2003: *Države svijeta 2000*, Mozaik knjiga, Zagreb. Relevant scientific and technical journals.		
2.13. Quality assurance methods that ensure the acquisition of exit competences	Procedures outlined in *Regulations and Handbook on the Quality Assurance* at the University of Zagreb and the Faculty of Science: - university and faculty student survey - teaching self-evaluation: modernizing and reassessment of course's goals and content, and strategy of teaching and learning; evaluation of learning outcomes by analysis of students level of success according to Student Office data and self-records - outgoing survey: undergraduate university study evaluation		
2.14. Other (as the proposer wishes to add)			

DETAILED PROPOSAL OF THE STUDY PROGRAMME

1. GENERAL INFORMATION			
1.1. Course teacher	Vedran Prelogović	1.6. Year of the study programme	2nd and 3rd
1.2. Name of the course	**Geography of Less Developed Countries**	1.7. Credits (ECTS)	3
1.3. Associate teachers		1.8. Type of instruction (number of hours L + S + E + e-learning)	30+15+0+0 (2+1+0+0)
1.4. Study programme (undergraduate, graduate, integrated)	Undergraduate university study in geography, course: research	1.9. Expected enrolment in the course	30
1.5. Status of the course	Elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	1
2. COUSE DESCRIPTION			
2.1. Course objectives	The main object of the course is to enable students to understand complex relations in the less developed countries (functional, social and morphological transformations). Particular objects of the course are: synthesis of contemporary theory and methodology on transformations in the less developed countries, which are induced by the interaction of different economic, social, cultural and political factors on global, regional and local scale. On the number of examples from various less developed regions and countries of the world, problems like excessive exploitation of natural resources, population growth, over-urbanisation etc. will be discussed and explained. Special attention within this course is given to: writing of report, reading of selected texts related to the different aspects of the development of less developed countries, thematic discussions on different topics etc.		
2.2. Course enrolment requirements and entry competences required for the course	-		
2.3. Learning outcomes at the level of the programme to which the course contributes	**Knowledge and understanding of:** Geographic terminology, definitions and theories. Applying of methodology in geography and current investigations in its field. Appropriate statistics and graphic techniques. Methods in cartography, interpretation of elements and contents of geographical maps. Elements and factors in physical geography and their interrelationship in geosystems on various spatial levels. The role of population in processes and functional spatial organization. Urban and rural spatial systems, their interrelationship and structural and functional characteristics. Systems and models in economic geography, their structure, dynamics and development factors on various spatial levels.		

	Factors of development and characteristics of transportation modes, transportation networks, dynamics of transportation flows, impacts of relationship of transport and other economic activities. Processes in political geography, with emphasis on globalisation and integration processes. Geographic aspects of socio-cultural processes. Causality relations between the elements and factors of natural environment and society. Concept of region and regionalisation. Concept of regional and sustainable development. **Cognitive abilities and skills:** Applying knowledge in determining, defining and solving spatial problems of medium-level complexity. The ability to interpret and discuss relevant and actual geographic problems and processes. The skills needed for evaluation, interpretation and synthesis of relevant information. The skills needed for presenting scientific contents and stances in written and oral form. **Practical abilities and skills:** Applying appropriate statistic and graphic methods and techniques in analysis and in the presentation of the research results. Applying appropriate maps and cartographic methods and techniques in analysis and in the presentation of the research results. **Generic abilities and skills:** Problem solving, relating to qualitative and quantitative geographic information. Conducting literature research and use databases and other sources of information. Information-technology skills: word-processing and spreadsheet usage, data logging and storage, subject-related use of the Internet. Functioning effectively as an individual and as a team member. Continuous professional development.
2.4. Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	- distinguish and explain approaches in the research of the less developed countries - explain historic geographic context of the development of the less developed countries - conduct a research project on the topic (for example: demographic, urban, economic development, excessive exploitation of natural resources and the impact that it has on the environment etc). in a selected less developed country or a region of the world - write a report/essay on a topic related to regional differences in the less developed countries
2.5. Course content broken down in	1 INTRODUCTORY LECTURE – Goals and aims; Students obligations; Schedules of written and oral exams; Definitions of

DETAILED PROPOSAL OF THE STUDY PROGRAMME

<table>
<tr><td>detail by weekly class schedule (syllabus)</td><td colspan="6">main notions and terms
2 THEORETICAL FRAMEWORK – Theories and models of the less developed countries; Spatial determination of the less developed countries
3 HISTORIC GEOGRAPHIC CONTEXT OF THE DEVELOPMENT - European expansion from 15th to 19th century (mercantile period); European expansion from 19th to mid 20th century (period of industrial colonialism); Decolonisation
4 DEMOGRAPHIC CHARACTERISTICS 1 – Number, distribution and population density
5 DEMOGRAPHIC CHARACTERISTICS 2 – Migrations; Structures of the population; Population policy
6 AGRICULTURE – Characteristics of agricultural production; Agriculture and environment; Expansion of agricultural land use
7 RURAL AREAS – Models of the development of rural areas; Transformation of traditional rural structures; Socioeconomic transformations; Abandoning of rural areas
8 URBANISATION 1 – Characteristics of urbanisation in the less developed countries; Influence of immigration; Spatial structure of the cities
9 URBANISATION 2 – Housing problems; Squatter settlements; Emergence of megacities; Urban planning in the less developed countries
10 ECONOMIC GEOGRAPHIC CHARACTERISTICS 1 – Natural resources; Industrialisation (colonial and postcolonial period); Structure of economic sectors; Employment and unemployment
11 ECONOMIC GEOGRAPHIC CHARACTERISTICS 2 – Tertiarisation; Unequal economic development; Influence of multinational companies; Integration into global economy; New dependence
12. REGIONAL DEVELOPMENT (SELECTED EXAMPLES) – Regional differences and development; Regional plans, programs and models; Regional planning; Development strategies
13. SOCIOCULTURAL CHARACTERISTICS – Changes in the way of life; Relations towards/with developed countries of the world; Importance of religion; Ethnic diversity
14. POLITICAL CHARACTERISTICS – Colonial heritage; Political particularism; Area of conflict, Political and economic associations
15. GLOBALISATION – Less developed countries in a globalised world; Assumption of the future development</td></tr>
<tr><td rowspan="2">2.6. Format of instruction:</td><td colspan="2">X lectures
X seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">X independent assignments
X multimedia and the internet
☐ laboratory
X work with mentor
☐ (other)</td><td>2.7. Comments:</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>2.8. Student responsibilities</td><td colspan="5">Regular class attendance. Writing of the report. Oral presentation of the written report within the thematic discussions.</td></tr>
<tr><td>2.9. Screening student work (name the</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
</table>

DETAILED PROPOSAL OF THE STUDY PROGRAMME

proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work		Report		(other)	
	Essay	0,5	Seminar essay	0,5	(other)	
	Tests		Oral exam	1	(other)	
	Written exam	1	Project		(other)	
2.10. Grading and evaluating student work in class and at the final exam	Written evaluation, oral examination.					

	Title	**Number of copies in the library**	**Availability via other media**
2.11. Required literature (available in the library and via other media)	Chant, S., McIlwaine, C., 2009: *Geographies of Development in the 21st Century: An Introduction to the Global South*, Edward Elgar, Cheltenham.	5	yes
	Potter, R. B., Binns, T., Elliott, J. A, Smith, D., 2008: *Geographies of Development,* Pearson Education Limited, Harlow.	5	yes
	Williams, G., Meth, P., Willis, K., 2009: *Geographies of Developing Areas: the Global South in a Changing World*, Routledge, London and New York.	5	yes

2.12. Optional literature (at the time of submission of study programme proposal)	Desai, V., Potter, R.B. (ur.), 2008: *The Companion to Development Studies*, Routledge, London. Potter, R., Conway, D., Evans, R., Lloyd-Evans, S. (ur.), 2012: *Key Concepts in Development Studies*, Sage, London.
2.13. Quality assurance methods that ensure the acquisition of exit competences	In accordance with the Rule book and Manual of quality management at the University of Zagreb and the Faculty of Science.
2.14. Other (as the proposer wishes to add)	