



1. GENERAL INFORMATION					
<b>Study programme title</b>	University graduate study programme in geology Subprogramme Geology of mineral resources and geophysical exploration				
	University graduate study programme in geological engineering Subprogramme Environmental Geology				
<b>Course title</b>	<b>Methods in Sedimentary Petrology</b>		<b>Semester</b>	II.	
<b>Teacher</b>	Assist. Prof. Uroš Barudžija, PhD		<b>Course code</b>	27251	
<b>Course type</b>	<input type="checkbox"/> obligatory <input checked="" type="checkbox"/> elective		<b>ECTS</b>	3	
<b>Location</b>	P6 V315				
<b>Language</b>	<input checked="" type="checkbox"/> Croatian <input checked="" type="checkbox"/> English				
<b>Class type</b>	<b>Weekly hours</b>	<b>Teaching staff</b>	<b>Office hours</b>	<b>Room</b>	<b>E-mail</b>
<b>Class</b>	1	Assistant Professor Uroš Barudžija, Ph D	Thursday, 10.00-12.00	P6 312	<a href="mailto:uros.barudzija@rgn.hr">uros.barudzija@rgn.hr</a>
<b>Practice</b>	1,5	Duje Smirčić, Ph D	Thursday, 12.00-14.00	P6 312	<a href="mailto:duje.smircic@rgn.hr">duje.smircic@rgn.hr</a>
<b>Field lecture</b>	0,5				
<b>E-learning level</b>	2		<b>Percentage of on-line class (max. 20%)</b>		10
2. COURSE DESCRIPTION					
<b>Course aims</b>	Introduction to and selective application of analytical methods in the investigation of lithified and non-lithified sediments and soils. Mastery of techniques and skills in investigation of sediments, sample preparation, quantitative and qualitative estimation of mineral composition, granulometry and morphometrics. Mastery of techniques and skills in interpretation, classification and presentation of the results, acquired by the methods of investigation of sediments.				
<b>Requirements for applicants</b>	Sedimentary petrology course - passed exam. Interest in sediments research.				
<b>Programme level learning outcomes with course contribution</b>					
<b>Expected course level learning outcomes (4-10 outcomes)</b>	Students will be able to: <ol style="list-style-type: none"> <li>1. - identify and describe various analytical methods for the investigation of lithified and non-lithified sediments and soils.</li> <li>2. - define and describe, in the field and in the laboratory, various types of lithified and non-lithified sediments and soils.</li> <li>3. - define the nomenclature of lithified and non-lithified sediments and soils.</li> <li>4. - present the results of the investigation of lithified and non-lithified sediments and soils.</li> <li>5. - explain formation processes for lithified and non-lithified sediments and soils.</li> </ol>				



	6. - explain and summarize the basic methods for investigation of lithified and non-lithified sediments and soils. 7. - define and conduct the project for field and laboratory investigation of lithified and non-lithified sediments and soils.		
Course contents by individual lessons			
Class		Practice	
<b>Students' obligations</b>	Students are obligated to regularly attend the lectures, laboratory exercises and field work, and to submit completed project tasks within a given deadline. Basic precondition to start a project task is individual theoretical preparation (adoption of all available theoretical knowledges and regulations, which will be checked by the instructors), immediately before start performing each particular project task.		
<b>Students' work track</b> (indicate share in ECTS points for each activity so that overall ECTS number corresponds to class credits score):	Class attendance	0,5	Research
	Project		Report
	Colloquium		Seminar paper
	Practical work	0,75	Oral exam
	Written exam		(Extra)
<b>Type of exam, grades and evaluation of students work</b> during class and on final exam	Basic preconditions for the students to attend the oral exam are completed all the project tasks, according to the regulations and within a given deadlines. All tasks (results and interpretations) must be also evaluated positively (at least with the mark 2) by the instructor. A total of 50% of the student's final grade for the course is the result of the individual and collective work (in a group(s)) within the exercises during semester, and 50% is the result of the oral exam.		
<b>Mandatory literature</b> (available in the Library and via other media)	<i>Methods in Sedimentary Petrology</i> : learning materials attached in the e-course at LDS Merlin. (in Croatian and English) Tišljar, J. (1994): Sedimentne stijene ( <i>Sedimentary Rocks</i> ). Manualia universitatis studiorum Zagrabienensis, Školska knjiga, Zagreb, 422pp. (in Croatian) (p. 11-282)		
<b>Additional literature</b> (at the moment of study program proposition application)	Müller, G. (1967): <i>Methods in Sedimentary Petrology</i> . Hafner Publ. Co., London, 283pp. Tucker, M.E. (1988): <i>Techniques in Sedimentology</i> , -Blackwell Sci. Publ., Oxford, 391pp. Collinson, J.D. & Thompson, D.B. (1989): <i>Sedimentary Structures</i> . -Unwin Hyman, London, 199pp. Stow, D.A.V. (2005): <i>Sedimentary Rocks in the Field-A Colour Guide</i> . -Manson Publ., London, 318pp. Coe, A.L. (2010): <i>Geological Field Techniques</i> . -Wiley-Blackwell & The Open University, Milton Keynes, 323pp.		
<b>Examination terms</b>			
<b>Other</b>			



Sveučilište u Zagrebu  
**RUDARSKO-GEOLOŠKO-NAFTNI FAKULTET**

Course Teacher:

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Assitant Professor Uroš Barudžija, PhD