

NAME OF THE COURSE		IT Project - Database				
Code	PMIH11	Year of study	UGU-2			
Course teacher	prof.dr. sc. Marko Rosić dr. sc. Tonči Dadić	Credits (ECTS)	2,0			
Associate teachers	Monika Mladenović	Type of instruction (number of hours)	L	S	E	F
					30	
Status of the course	mandatory	Percentage of application of e-learning				
COURSE DESCRIPTION						
Course objectives	The acquisition of knowledge needed to project relational database					
Course enrolment requirements and entry competences required for the course	Admission requirements: enrolled databases. Entry competences: user level using the operating system, knowledge of relational databases.					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>Assess the feasibility of the relational database project</li> <li>Establish relational model of relatively simple problems from the real world which are described in natural language</li> <li>Create relational database</li> <li>Conduct static database analysis in terms of estimating the required resources</li> <li>Conduct dynamic system analysis with regard to the importance and frequency of SQL query databases</li> <li>Optimize database</li> <li>Backup database</li> </ul>					
Course content broken down in detail by weekly class schedule (syllabus)	<ul style="list-style-type: none"> <li>Feasibility study of the information system (2h)</li> <li>System analysis (2h)</li> <li>System modeling (2h)</li> <li>ER modeling</li> <li>Mapping of the ER model into relational model (2h)</li> <li>Implementing of the relational database (2h)</li> <li>Static analysis of the relational database (2h)</li> <li>Dynamic analysis: quantifying the importance and frequency of execution, creating indexes, and query optimization (2h)</li> <li>Project taska and analysis of examples (2h)</li> <li>Individual work on the project (6h)</li> <li>Presenting projects (4h)</li> </ul>					
Format of instruction						
Student responsibilities	Lessons attendance, homeworks, activity on lessons, written exam, homework					

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)	Name	Ects	Name	Ects	Name	Ects
Grading and evaluating student work in class and at the final exam	Activity of students in lectures and exercises (presence at the exercises and work on project) (25%) Final project (75%) The final grade is derived on the basis of all these ratings with weighting factors as indicated in parentheses for each form of assessment.					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	Mladen Varga: Databases - conceptual, logical and physical data modeling, Association for the development of information literacy (DRIP), Zagreb, 1994 (15 copies in the library)			15		
	Tonci Dacic: Databases - script: <a href="http://www.pmfst.unist.hr/~tdadic/Dadic_BazePodataka.pdf">http://www.pmfst.unist.hr/~tdadic/Dadic_BazePodataka.pdf</a>			0	Yes	
Optional literature (at the time of submission of study programme proposal)						
Quality assurance methods that ensure the acquisition of exit competences	Talk with students, student evaluation using the anonymous survey, the success of students in the exam, self-assessment.					
Other (as the proposer wishes to add)						