

COURSE TITLE		Advanced web programming					
Course code	DPR002	Year of study	1.				
Lecturer(s)	Marina Rodic, senior lecturer	ECTS (Number of credits allocated)	6				
Associates		Total lesson hours per semester	Lecture	Seminar	Practical	Laboratory	
			30	15	15		
Course status	Core	Percentage share of e-learning	50%				
COURSE DESCRIPTION							
Course Objectives	<ul style="list-style-type: none"> <li>• understanding of basic terms and procedures in the field of creating and designing web applications</li> <li>• theoretical and practical student preparation for the web application development</li> </ul>						
Course enrolment requirements and entry competencies required for the course	Good knowledge of programming in one of the programming languages (Python, Java, C#, PHP, etc.)						
Learning outcomes On successful completion of this course, student should be able to:	<ol style="list-style-type: none"> <li>1. Create server and client side communication on the network.</li> <li>2. Create an application guided by the principles of MVC and REST API.</li> <li>3. Analyze the concepts of validation, authentication and authorization.</li> <li>4. Design a solution using asynchronous concepts.</li> <li>5. Create reactive components in the user interface.</li> <li>6. Anticipate Internet security issues.</li> </ol>						
Course content	Introduction. Reviewing the basics of the command line and open source versioning systems. Selected programming language. Client application development using mocked data. Server application development and web API modeling. Connecting server and client applications. Security authentication, authorization, CSRF token, CORS headers.						
Types of teaching:	<input checked="" type="checkbox"/> lecture <input type="checkbox"/> seminars and workshop <input checked="" type="checkbox"/> practical <input type="checkbox"/> combined e-learning <input type="checkbox"/> field research		<input checked="" type="checkbox"/> self-study <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input checked="" type="checkbox"/> mentoring work <input type="checkbox"/> (others)				
Student obligations	Attending classes, seminar, exams.						
Monitoring student work (enter the share in ECTS credits for each activity so that the total number of ECTS credits corresponds to the credit value of the course):	Class attendance	2	Research	0,5	Practical work		
	Experimental work		Report		(others)		
	Essay		Seminar	0,5	(others)		
	Self-study	0,5	Workshop		(others)		
	Project	2,4	Office hours, mid-term exams and	0,1	(others)		

			final exam			
Assessment and evaluation of student work during classes and at the final exam	<b>CONTINUOUS ASSESSMENT</b>					
	Continuous testing indicators			Performance $A_i$ (%)	Grade ratio $k_i$ (%)	
	Successfully completed exercises.			50 - 100	50	
	Attendance and activity at lectures. Successfully completed project.			50 – 100	50	
	<b>FINAL ASSESSMENT</b>					
	Indicators checks (first and second final exam terms)			Performance $A_i$ (%)	Grade ratio $k_i$ (%)	
	Practical exam (on computer and oral)			50 - 100	50	
	Theoretical exam (written and/or oral)			50 - 100	10	
	Previous activities (continuous assessment)			50 - 100	40	
<p>The grade (in percentages) is formed on the basis of all indicators that describe the level of student activities according to the relation:</p> $Grade (\%) = \sum_{i=1}^N k_i A_i$ <p><math>k_i</math>- weighting factor for each activity,  <math>A_i</math>- success in percentage achieved for a particular activity,  <math>N</math> - total number of activities.</p>						
<b>PERFORMANCE AND GRADE</b>						
Percentage		Criteria			Grade	
50% - 61%		basic criteria met			sufficient (2)	
62% - 74%		average performance with some errors			good (3)	
75% - 87%		above average performance with minor errors			very good (4)	
88% - 100%		outstanding performance			outstanding (5)	
Required reading	Teaching materials from lectures. (Moodle)					
Optional reading						
Quality monitoring to ensure the	<ul style="list-style-type: none"> <li>Records of class attendance and success in performing student obligations</li> <li>Updating detailed course curricula</li> </ul>					

acquisition of established learning outcomes	<ul style="list-style-type: none"><li>• Supervision of teaching activities</li><li>• Continuous quality control of all parameters of the teaching process in accordance with the Action Plans</li><li>• Semester-based student survey in accordance with the "Ordinance on the procedure of student evaluation of teaching work at the University of Split" (UNIST, Centre for Quality Improvement).</li></ul>
Other information	