

## DESCRIPTION OF A STUDY COURSE – SYLLABUS

<b>Title of a course</b>	Development of Web applications				
<b>Head of course</b>	Vlatka Davidović, Senior Lecturer				
<b>Study programme</b>	Professional undergraduate study Information Science				
<b>Status of a course</b>	Obligatory				
<b>Year of study</b>	3.	<b>Semester</b>	V	<b>ECTS credits</b>	5
<b>Teaching plan (L + E + S+ Pr)</b>	2 + 2 + 0 + 0				
<b>Goals of a course</b>					
Acquiring knowledge of basic web technologies (HTML, CSS, Javascript) and communication protocols, and acquiring competencies for web site development and implementation.					
<b>Conditions for enrolling course</b>					
No conditions					
<b>Learning outcomes on a level of a study programme which includes course</b>					
<p>Outcome 2: Apply business information system design methods.</p> <p>Outcome 4: Develop an application solution for the Internet and desktop environment.</p> <p>Outcome 5: Apply web site design and implementation methods.</p> <p>Outcome 6: Apply appropriate business information system protection techniques.</p> <p>Outcome 7: Design and produce digital multimedia materials needed in business systems.</p> <p>Outcome 12: Apply engineering methods and principles in information science.</p> <p>Outcome 14: Participate in teamwork.</p> <p>Outcome 15: Independently present professional content in written and spoken form in Croatian and English.</p>					
<b>Expected learning outcomes on a level of a course</b>					
<ol style="list-style-type: none"> <li>1. Analyse the features of a web document, web application, web site</li> <li>2. Interpret communication via a global network.</li> <li>3. Apply and document the basic principles of building the client portion of a web site</li> <li>4. Apply and document the basic principles of the development and building the server portion of a web site</li> <li>5. Prepare a website for online publication</li> </ol>					
<b>Content of a course</b>					
Concept of a Web page and applications. Web page design and development. Organization and content of the Web. Development of a Web application. Process of creating a Web publication. Using Web servers. Using relational bases in Web applications. Web system security and controlling the access to the server and performances. Developing Web interaction and data integration. Web expansion. Optimization of the Web server. Security filters. Releasing content on the Web. Visibility of Web pages when browsing. Tools for advancing Web pages. Back office integration. Exercises are carried out in groups of students. Single Web pages are designed as well as complete applications.					
<b>Teaching modes</b>	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
<b>Comments</b>					
<b>Students' obligations</b>					
If a student passes the full exam, he / she is obliged to do the project assignment in the prescribed range beforehand.					
<b>Grading, evaluation and monitoring of students' work continuously during lectures and exams</b>					

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

#### Continuous check-up:

Outcomes	Written test	Project	Threshold	Max
Outcome 1	10%		5%	10%
Outcome 2	10%		5%	10%
Outcome 3	10%	25%	17,5%	35%
Outcome 4	10%	25%	17,5%	35%
Outcome 5		10%	5%	10%
Percentage of ECTS	2	3	-	-
Total	40%	60%	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

#### Exam term:

Outcomes	Written exam	Project	Oral exam	Max
Outcome 1	10%			10%
Outcome 2	10%			10%
Outcome 3	10%	5%	20%	35%
Outcome 4	10%	5%	20%	35%
Outcome 5		10%		10%
Percentage of ECTS	2	1	2	-
Total	40%	20%	40%	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

#### Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

#### Obligatory literature

1. Powel, T: Web dizajn, Mikroknjiga Beograd, 2001.
2. W3Schools tutorijali: <https://www.w3schools.com/> (1999-2019)

#### Additional literature

1. Gustafson, J.M., HTML5 -Web Application Development By Example, Packt Publishing, 2013.



