

### DESCRIPTION OF A STUDY COURSE – SYLLABUS

<b>Title of a course</b>	<b>Web Programming</b>				
<b>Head of course</b>	<b>Vlatka Davidović, Senior Lecturer</b>				
<b>Study programme</b>	<b>Professional undergraduate study Telematics</b>				
<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 and communication protocols, and acquiring competencies for the development and implementation of web applications and services					
<b>Conditions for enrolling course</b>					
No conditions					
<b>Learning outcomes on a level of a study programme which includes course</b>					
<p>Outcome 4: Use computer principles and methods related to the architecture and organization of computers and computer networks.</p> <p>Outcome 5: Use computer principles and methods related to programming languages, databases, and operating systems.</p> <p>Outcome 6: Design and implement desktop, web and mobile computer applications and computer programs for microcomputers and microcontrollers, with or without a database.</p> <p>Outcome 10: Analyse and implement an information system in the field of telematics.</p> <p>Outcome 15: Participate in teamwork and 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. Apply client and server technology in website construction</li> <li>2. Create dynamic web content</li> <li>3. Apply and document the basic principles of the development and building a web site</li> <li>4. Apply standards and protocols for data sharing on the web</li> <li>5. Apply tools to create simple web services</li> </ol>					
<b>Content of a course</b>					
<p>Extensible Markup Language (XML); Separation of structure, form and content in files; Data Type Definition (DTD); XML Schema Definition (XSD); XML Stylesheets (XSL/XLST); Wireless Application Protocol (WAP); Development of wireless Web application with WML and WMLScript; PHP programming on servers – standard libraries, forwarding parameters, Web forms processing; Java Servlet – basic concepts, Servlet engine Tomcat, development and instalment of Java Servlet; Java Beans and Java Server Pages (JSP) – syntax and semantics of JSP, integration with Java Beans and installation in Servlet engine; Web services – standards for Web Services Broker (UDDI, ebXML); Web services stack – XML / WSDL / SOAP / UDDI; Programming and integration of Web service Apache SOAP and Java; Apache Axis; Access to Web services with PHP and SOAP.</p>					
<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 enters the full examination, he or she must first do a project assignment within the prescribed range.					

### Grading, evaluation and monitoring of students' work continuously during lectures and exams

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	20%	10%	15%	30%
Outcome 2	10%	10%	10%	20%
Outcome 3		20%	10%	20%
Outcome 4	10%	10%	10%	20%
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.

