

DESCRIPTION OF THE STUDY SUBJECT

Title

INTERNET TECHNOLOGIES

Scope of the subject

Semester	Mode of studies	Structure*					Total number of hours	Number of credits	Group and type of subjects
		L	Lw	PR	C	S			
I	Full-time	10	45	-	10	71	216	8	Compulsory subjects of the study field
II		-	-	60	-	20			
II	Part-time	6	24	-	35	71	216	8	
III		-	-	60	-	20			

*L – lectures, PS – practical activities, seminars, LW – laboratory work, PR – practice, CP – course paper, C – consultations, S – self-study

Aim of the subject

Know and understand W3C requirements for websites, website design principles, HTML, CSS, JavaScript, CMS, SEO optimization basics. To be able to independently design, develop, test web sites and place on a remote server.
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Necessary background knowledge for studying the subject

Students shall have heard the subject computer graphics.
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Content of the subject

Title of the topic and description of the content	Number of contact hours				S	Total number of hours
	L	Lw	PR	C		
1. W3C requirements for websites, designing of websites applying modern technologies and tools, the quality model of websites and their assessment criteria, architecture of information, optimisation of websites for search engine (SEO).	2	-	-	-	6	8
Test	-	2	-	1	2	5
2. Designing of the website and creation of the structure of the webpage using the HTML language. Testing of compliance of the website to W3C HTML standards and placement on a remote server.	2	-	-	-	6	8
Laboratory works: description of the structure of the HTML document, headings, paragraphs, links, images, tables, lists, explanatory labels, horizontal lines, HTML media, HTML5 standard.	-	10	-	2	4	16
Test No.1	-	2	-	1	4	7
3. Customization of the CSS language for creation of the website design. Testing of compliance of the website to W3C CSS standards and placement on a remote server.	2	-	-	-	4	6
Laboratory works: different kinds of styles of CSS, selectors, parameters of font, text, links, tables, lists. Pseudo-classes, pseudoelements, frames, margins, positions, CSS3 standard.	-	11	-	2	6	19
Test No.2	-	2	-	1	10	13
4. JavaScript basics.	2	2	-	-	-	4
Laboratory works: forms, constants, variables, arrays, conditional sentences, cycles, DOM (for work with forms).	-	6	-	2	10	18
5. Development of a modern and dynamic website using the content management system (CMS).	2	8	-	1	9	20
I semester. Preparation for defence of laboratory works and their defence	-	2	-	-	10	12
I semester. The total number of hours	10	45	-	10	71	136
I task. To analyze selected websites according to quality assessment criteria. To justify the choice of website design and development tools.	-	-	10	-	4	14
II task. To design a website.	-	-	10	-	2	12

Title of the topic and description of the content	Number of contact hours				S	Total number of hours
	L	Lw	PR	C		
III task. To build a modern and dynamic website using HTML, CSS, Javascript languages or free content management system (CMS). To test compliance of website to W3C standards and to place on a remote server.	-	-	34	-	2	36
IV task. To prepare the written part of the project and presentation.	-	-	2	-	7	9
II semester. Preparation for defence of practice and its defence.	-	-	4	-	5	9
II semester. Total number of hours	-	-	60	-	20	80
Total number of hours	10	45	60	10	91	216

Assessment of learning outcomes

Ten-point criteria-based assessment system as well as cumulative assessment using individual cumulative index (ICI) are applied. The overall grade is the sum of grades for intermediate accountings and practice (PR) multiplied by weighted coefficients. Assessment formulas:

I semester. $ICI1 = 0,2 T + 0,4 Lw + 0,4 CT$, where T - test, Lw – laboratory works, CT – control tests

II semester $ICI2 = 0,15 I PRT + 0,15 II PRT + 0,3 III PRT + 0,2 IV PRT + 0,2 DPR$, where I PRT, II PRT, III PRT, IV PRT – practice tasks, DPR – defence of practice

Final grade: $ICI = 0,5 ICI1 + 0,5 ICI2$

Recommended literature

Key literature						
No.	Year of publishing	Author(s) and title of the publication	Publishing house	Number of copies and/or internet link		
				ŠSC library	Other premises	Other libraries *
1.	2015	Harwani B., .Foundation Joomla!: [design, create, and administer your own website in no time]	Apress	1	-	-
2.	2015	McPeak J., Wilton P. Beginning JavaScript	John Wiley & Sons	1	-	-
3.	2011	Jusas S. Praktiškas CSS pradžiamokslis	Smaltija	2	-	6
4.	2009	Vidžiūnas A., Vitkutė D. Interneto paslaugos ir svetainių kūrimas	Smaltija	3	-	3
Additional literature						
No.	Year of publishing	Author(s) and title of the publication	Publishing house and/or internet link			
1.	2012	E. Robson, E. Freeman Head first HTML and CSS.	O'Reilly			
2.	2011	Ch. Schmitt. CSS kalba ir pakopiniai stiliai profesionalams.	O'Reilly			
3.		Complete Link Building by SEO Firm for High Ranking and High Traffic	http://www.100seotips.com			
4.		The World's largest web developer site.	http://www.w3schools.com			
5.		Trending in Programming.	https://www.scribd.com/books/Computers-Technology/Programming			

* ŠAVB – Šiauliai Region Povilas Višinskis Public Library, ŠU – library of Šiauliai University

Required material resources and their short description

- **Equipment (devices):** a computers (16 units), computers connected to the local network and connected to the Internet, multimedia projector, printer.
- **Software:** Notepad++, FileZilla, IrfanView, Joomla or another open source product TVS, WampServer.

The description prepared by:

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