

Subject code	Credits
INF3032	4

Title

SAITYNŲ GRAFINIS DIZAINAS

Title in English

WEB GRAPHIC DESIGN

Subject goal and annotation

The course presents modern internet technologies, makes introduction to the history of the Internet and Web. Students are acquainted with the main possibilities of web page design and implementation, existing standards, technologies and tools. Students learn, how to make web pages using modern technologies ((X)HTML, XML, JavaScript, jQuery), how to separate content and design using CSS technology. Requirements for graphical elements of web systems, possibilities and problems of graphical design implementation are presented.

Prerequisites

Undergraduate courses: introduction to programming, computer networks and internet technologies

Relationship between the learning outcomes of the Programme and learning outcomes of the subject

Learning outcomes of the Programme	Learning outcomes of the subject	Criteria for measuring the achievement of learning outcomes
3. Knowledge of basic and advanced computer science and its application.	Understanding the structure of the web IS, web programming tools and technologies. Understanding the principles of web IS development.	Student demonstrates the ability to create websites with different layout structure, using selected programming tools and technologies.
4. Knowledge of basic and advanced multimedia theories and applications, ability to apply it.	Knowledge about the integration of multimedia and hypermedia elements, ability to apply it. Understanding the importance of graphic design in the context of data streams. Ability to use different colour palettes despite the different colour interpretation via websites browsers.	Student demonstrates skills in integrating multimedia and hypermedia elements into his website, he is able to optimize website graphic. Students prepare website design, compatible with various website browsers and present them to their colleagues and lecturer.
6. Knowledge of Internet and multimedia products development, their commercial and social impact. 13. Ability to analyse the newest trends in Internet and multimedia systems (and general computer science and digital arts) and apply them in development of novel systems.	The usage of various websites development technologies for the different stages of website development.	Student demonstrates the ability to use selected technologies in different website development processes.

10. Analysis, design and development of advanced Internet systems. 13. Ability to analyse the newest trends in Internet and multimedia systems (and general computer science and digital arts) and apply them in development of novel systems. 15. Clear and convincing presentation of problems and solutions to experts and non-experts using ground knowledge, reasoning, relevant presentation tools and methods.	Ability to design and develop advanced personal page, including multimedia elements.	Oral student presentation including critical examination of his personal website.
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Subject content

	Lecture topics and contents	Hours
1.	Internet and World Wide Web evolution processes	2
2.	Web architecture and structure. Client-server communication.	2
3.	Selected website development tools. Website hosting on server.	2
4.	(X)HTML language in website development. Examples.	6
5.	Review of <i>Microsoft Expression Studio</i> product: the possibility to import graphics, building <i>SkechFlow</i> , <i>SuperView</i> functionality, the integration of <i>Silverlight</i> or other adequate elements.	6
6.	Development of the website – the usage of cascading style sheets (CSS)	2
7.	Development of dynamic website with <i>JavaScript</i> , <i>jQuery</i> and <i>JSON</i> .	4
8.	The integration of multimedia and hypermedia elements. Requirements for website graphics elements.	6
	Total	30

Practical work contents

Students with the lecturer prepare their personal websites, regarding the requirements for (X)HTML, CSS and JavaScript (jQuery, JSON optional) languages, multimedia and graphics elements.

Evaluation of study results

Final written exam (50%), mid-term written exam (17%), and assessments of laboratory (practical) work (33%).

Distribution of subject study hours

Lectures	30
Laboratory work	30
Individual studies (including studies in groups, preparation for the mid-term and final exams)	48
Total	108

Recommended literature

No	Authors, title	Number of copies available		
		in the Library of VMU	in specialized publication collections at VMU	in other libraries
Basic materials				
1.	V. Barzdaitis, A. Vidžiūnas. Interneto svetainių ir tinklalapių kūrimas. 2005	5	10	

2.	Jennifer Niederst Robbins Tinklapių dizainas. (X)HTML kalbos, pakopinių stilių ir tinklapių grafikos pradžiamokslis. 2008	4		
3.	A.Vidžiūnas, D.Vitkutė. Interneto paslaugos ir svetainių kūrimas. 2009	5	10	
4.	Overview of Internet Technology. 2010			
Supplementary materials				
1.	<p>WikiBooks:</p> <p>„HyperText markup Language“ http://en.wikibooks.org/wiki/HyperText_Markup_Language</p> <p>„Cascading Style Sheets“ http://en.wikibooks.org/wiki/Cascading_Style_Sheets</p> <p>„JavaScript“ http://en.wikibooks.org/wiki/JavaScript</p> <p>„Authoring Web Pages“ http://en.wikibooks.org/wiki/Authoring_Webpages</p>			

Subject prepared and coordinated by

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