

UNIVERSITY OF ECONOMICS - VARNA
MASTER DEGREE STUDIES CENTER
DEPARTMENT „INFORMATICS“

ACCEPTED BY:

Rector:

(Prof. Dr. Plamen Iliev)

SYLLABUS

SUBJECT: “WEB TECHNOLOGIES”;

DEGREE PROGRAMME: “Computer Science”; MASTER`S DEGREE

YEAR OF STUDY: 5; SEMESTER: 10 (other fields graduates);

TOTAL STUDENT WORKLOAD: 150 h.; incl. curricular 60 h.

CREDITS: 5

DISTRIBUTION OF WORKLOAD ACCORDING TO THE CURRICULUM

<i>TYPE OF STUDY HOURS</i>	WORKLOAD, h.	TEACHING HOURS PER WEEK, h
CURRICULAR:		
incl.		
• LECTURES	30	2
• SEMINARS (lab. exercises)	30	2
EXTRACURRICULAR	90	-

Prepared by:

1.
(Assoc. Dr. Snezhana Sulova)

2.
(Assist. prof. Boris Bankov)

Head of department:
“Informatics” (Prof. Dr. Vladimir Sulov)

I. ANNOTATION

The course "Web Technologies" aims to give students from programme "Computer Science" necessary knowledge and skills in design, development and optimization of web sites. Through lectures and laboratory exercises, students will learn to:

- plan and design web site;
- choose and apply modern web technologies in the development of web sites;
- maintain and optimize web sites.

The knowledge and skills are used in all areas of public life - economics, public administration, education and others. After completing the course students will be able to create web sites that are used by organizations as an effective marketing and business tool.

The course will form the students' abilities for self-learning and help them to expand their knowledge and skills for using Internet technologies and making decisions on the application of innovations in web site development.

II. THEMATIC CONTENT

No. by row	TITLE OF UNIT AND SUBTOPICS	NUMBER OF HOURS		
		L	S	L.E.
1. Introduction to Web technology		2		-
1.1	History and evolution of Internet	1		-
1.2	Internet - basic terms	1		-
2. Web sites development		4		2
2.1	Web site classification	1		-
2.2	Planning and designing a web site	1		-
2.3	Technologies for creating web sites	1		-
2.4	Web site Search Engine Optimization (SEO)	1		2
3. The fundamentals of HyperText Markup Language (HTML)		8		10
3.1	HTML - basic structure of HTML documents and basic language elements	2		1
3.2	HTML tags for text, images, paragraphs, lists and hyperlinks	2		5
3.3	HTML tags to creating tables and forms	2		2
3.4	HTML structure tags	2		2
4. The fundamentals of Cascading Style Sheets (CSS)		10		12
4.1	Introduction to CSS	1		1
4.2	Selectors, grouping of selectors and inheritance of properties	2		2
4.3	CSS Properties for background, text, lists, hyperlinks, frames, images	3		4
4.4	Understanding the Box Model	1		1
4.5	Responsive design	1		2
4.6	Bootstrap framework	2		2
5. JavaScript fundamentals		6		6
5.1	Basic concepts and syntax	2		2
5.2	Working with variables, operators, loops, arrays and functions	2		2
5.3	Sliders, galleries and navigation elements	2		2
Total:		30		30

III. FORMS OF CONTROL:

No. by row	TYPE AND FORM OF CONTROL	№	extra-curricular, h.
1.	Midterm control		
1.1.	Practical test		20
1.2.	Test		20
Total midterm control:			40
2.	Final term control		
2.1.	Test		20
2.2.	Course project		30
Total final term control:			50
Total for all types of control:			90

IV. LITERATURE

REQUIRED (BASIC) LITERATURE:

1. Duckett, J. Web Design with HTML, CSS, JavaScript and jQuery Set. New York: John Wiley & Sons, 2014.
2. W3Schools Online Web Tutorials. // <http://w3schools.com>, (10.10.2016).

RECOMMENDED (ADDITIONAL) LITERATURE:

1. Bootstrap. The world's most popular mobile-first and responsive front-end framework. // <http://getbootstrap.com>, (10.10.2016).
2. David McFarland, D. CSS: The Missing Manual, O'Reilly Media, 2015.
3. David McFarland, D. JavaScript & jQuery: The Missing Manual (Missing Manuals), O'Reilly Media, 2013.
4. Frain, B. Responsive Web Design with HTML5 and CSS3. Birmingham: Packt Publishing, 2015.
5. MacDonald, M. HTML5: The Missing Manual (The Missing Manuals), O'Reilly Media, 2014.
6. Malone, J. HTML, CSS, and JavaScript All in One, Sams Teach Yourself: Covering HTML5, CSS3, and jQuery, Sams, 2014.
7. Robbins, J. Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics. United States: O'Reilly Media, 2012.