UNIVERSITY OF ECONOMICS - VARNA

MASTER DEGREE CENTER

DEPARTMENT OF INFORMATICS

Adopted by the FC (record №8 / 05.03.2020)
Adopted by the DC (record №6 / 17.02.2020)

ACCEPTED BY:
Dean:
(Prof. Vladimir Sulov, PhD)

SYLLABUS

SUBJECT: "WEB TECHNOLOGIES"

DEGREE PROGRAMME: "Computer Science"; MASTER`S DEGREE

YEAR OF STUDY: 5 for other fields graduates; SEMESTER: 10

TOTAL STUDENT WORKLOAD: 360 hours; incl. curricular 60 hours

CREDITS: 12

DISTRIBUTION OF STUDENT WORKLOAD ACCORDING TO THE CURRICULUM

TYPE OF STUDY HOURS	**WORKLOAD, hours**	**TEACHING HOURS PER WEEK, hours**
CURRICULAR: incl. • LECTURES • SEMINARS / LAB. EXERCISES	 30 30	 2 2
EXTRACURRICULAR	300	-

Prepared by:

1. **……..**
   (Assoc. prof. Snezhana Sulova, PhD)
2. **……**
   (Chief assist. prof. Boris Bankov, PhD)

Head of department
of Informatics: ……
(Prof. Julian Vasilev , PhD)

I. ANNOTATION

The course Web Technologies is designed to give students who major in 4.6 professional degrees the required knowledge and skills to design, develop, deploy and optimize websites. Through lectures and lab work, students will learn to:

- *prepare the design, organize the structure and layout of websites;*
- *select and apply modern web technologies in web site development;*
- *maintain and optimize websites.*

The acquired knowledge and skills can be applied in all spheres of public life - economy, public administration, education, etc. Thanks to the curriculum, students will be able to create websites for organizations as an effective marketing and business tool.

The course will build students' self-study and dissemination skills in the world of constantly evolving Internet technologies. It will help them improve their teamwork skills, continuous training, self-improvement, as well as decision-making on the implementation of new technologies in the field of web development.

II. THEMATIC CONTENT

№	TITLE OF UNIT AND SUBTOPICS	NUMBER OF HOURS		
		L	S	L.E.
Theme 1. Introduction to Web Technology		**2**	**-**	
1.1.	History and evolution of Internet.	1	-	
1.2.	World Wide Web – basic concepts.	1	-	
Theme 2. Web sites – planning, designing and development		**6**	**2**	
2.1.	Classification and characteristics of web sites.	1	-	
2.2.	Web site prerequisites and goals.	1	-	
2.3.	Planning and designing a web site.	1	-	
2.4.	Web site development technologies.	1	-	
2.5.	Tools for web site marketing.	2	2	
Theme 3. HTML (HyperText Markup Language) fundamentals		**10**	**12**	
3.1.	Introduction to HTML. HTML document structure and markup elements.	2	2	
3.2.	Inline and block elements. Text, paragraphs, lists, hyperlinks in HTML.	2	2	
3.3.	Importing multimedia – images, audio, video.	2	2	
3.4.	HTML tables and forms.	2	3	
3.5.	HTML semantic tags.	2	3	
Theme 4. CSS (Cascading Style Sheets) fundamentals		**10**	**14**	
4.1.	Introduction to CSS. Using selectors, grouping and inheritance of styling rules.	2	2	
4.2.	Stylizing text, paragraphs and lists.	2	3	
4.3.	Changing backgrounds, borders, margins and paddings.	2	3	
4.4.	Box model components. Layout element positioning.	2	3	
4.5.	Responsive web design. Bootstrap framework fundamentals.	2	3	
Theme 5. Web content management systems		**2**	**2**	
5.1.	Classification and characteristics of web content management systems.	1	1	
5.2.	Principles of using web content management systems.	1	1	
	Total:	**30**	**30**	

III. FORMS OF CONTROL:

№	TYPE AND FORM OF CONTROL	Number	extracur-ricular, hours
1.	**Midterm control**		
1.1.	Test	1	50
1.2.	Practical test	2	100
	Total midterm control:	**3**	**150**
2.	**Final term control**		
2.1.	Examination (test and course project)	1	150
	Total final term control:	**1**	**150**
	Total for all types of control:	**4**	**300**

IV. LITERATURE

REQUIRED (BASIC) LITERATURE:

1. Robbins, J. Learning Web Design. Boston: O Reilly, 2012.

RECOMMENDED (ADDITIONAL) LITERATURE:

1. Duckett, J. Web Design with HTML, CSS, JavaScript and jQuery Set. Wiley, 2014.
2. Frain, B. Responsive Web Design with HTML5 and CSS3. Birmingham: Packt Publishing, 2015.
3. Krol, K. WordPress 5 Complete. Birmingham: Packt Publ., 2019.
4. McGrath, M. HTML, CSS & JavaScript in easy steps. In Easy Steps Limited, 2020.
5. Meloni, J. and Kyrnin, J. HTML, CSS, and JavaScript All in One, Sams Teach Yourself, 3rd Edition, Sams Publishing, 2018.
6. Robbins, J. Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics, 5 edition, O'Reilly Media, 2018.
7. Bootstrap. The world's most popular mobile-first and responsive frant-end framework. // http://getbootstrap.com, (1.02.2020).
8. W3Schools Online Web Tutorials. // http://w3schools.com, (1.02.2020).