SYLLABUS

Approved by
Head of department
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Course Content	Faculty:	Engineering
	Department:	Computer and Information Technology
	Speciality(ies)/Course(s):	Computer Engineering, Information Technologies
	Subject code and name:	Web systems and technologies
	Education Year -Semester	2022-2023 / I
	Level:	
	Language:	English
	Compulsory / Elective:	Compulsory
	Prerequisite:	
	Instructors:	Rasim Mahmudov
	Email:	ramahmudov@beu.edu.az
	Phone:	+994557059289
	Consulting Hours and place:	Friday 11:00 – 13:00; main building, room 312

Subject hours				Credits	
Theory	Seminar	Laboratory	Total	Credit	ECTS
30	15		45		

Learning Objectives:	This course of Web Design and Programming provides an introduction of web-development techniques that use HTML, CSS, JavaScript technologies
Learning Outcomes and Competences:	• To understand the concept of Web Application Development and its architecture. • To understand the Essentials of Web Application Development. • To understand and practice web page designing techniques. • To develop Web Application • To create dynamic and animated Web Application
Text books and/or References:	1. Julie C. Meloni,Teach Yourself HTML, CSS and JavaScript, SAMS Publishing USA - 2012 2. Glenn Johnson, Programming in HTML 5 with JavaScript and CSS 3 , Microsoft Press USA – 2013 3. https://www.w3schools.com/

Assessment Criteria	Student workload	Methods	Percent
	Midterm Activity -1	Assignment	15%
	Midterm Activity -2	Assignment	15%
	Attendance		10%
	Midterm Individual Activity	Project	10%
	Laboratory Work		
	Final Exam	Written	50%
	Other		

Week	Subjects	Theory	Seminar	Laboratory
1.	**Introduction to web development** Web as a part of Internet. Frontend web development and backend web development. Setting up dev environment. Using VS Code. Web browsers.	2	1	
2.	**HTML format, tags, attributes** Hyper Text Markup Languages. Structure of HTML documents. Main tags of HTML, tag attributes and their values.	2	1	
3.	**Text elements. Lists, ordered, unordered and nested lists.** HTML Formatting: text and paragraph formatting. Paragraph, Break, Headers, Bold, Italic, Underline tags. Super and Subscript indexing, Horizontal Line, Preformatting. HTML Colors, Background color and background images. HTML lists: Unordered List, Ordered List, Nested lists.	2	1	
4.	**Tables. Merged cells. Table layout. Creating simple web page.** HTML tables. Table structure: Table Rows, Table Data, Table Headers, Label. Merged cells: colspan and rowspan attributes. Table Coloring. Table layout.	2	1	
5.	**Hyperlinks. URL, relative addresses, anchors. Creating multipage websites.**	2	1	

	Hyperlinks: External, Internal hyperlinks, Anchors. Target attribute. URL and Paths. Cross-file linking. Creating multipage website.			
6.	**Using form elements.** Form tag. Method and action attributes and their values. Https methods. Get and Post methods. Input, button, textarea tags. Checkboxes, drop-down lists and radio buttons.	2	1	
7.	**Frameset, frames and iframe.** Frameset and frames.Targeting into frameset. Advantages and disadvantages of Frame technology. Optimizing frames. iFrame. Modern usage of iFrame. Embedding movie from YouTube.	2	1	
8.	**Introduction to CSS. Inline, internal, external CSS implementation. CSS background and formatting.** Introduction to CSS. CSS Syntax. CSS usage methods: inline CSS, internal CSS, external CSS. Advantages of CSS technology. Apply single style to the many tags. CSS background formatting. Background color, url, size, repeat, position, attachment properties.	2	1	
9.	**CSS selectors, classes. Text and paragraph formatting. Using pseudo-classes. Implement CSS for hyperlinks.** CSS selectors. Tag selector. Take of one of many HTML elements by using id. Grouping many elements by class. Font, text and paragraph formatting. Working with hyper-links, using pseudo-classes. Organizing stylish navigation menu.	2	1	
10.	**HTML blocks. CSS box model. Border, margin, padding, float. CSS block layout. HTML5** HTML block tags: div, span. Working with block and inline display properties. CSS Box model. Border, margin, padding, width, height properties. Floating formatted block elements. CSS block layout. Create website layout by CSS.	2	1	
11.	**Advanced CSS. Display property. Interactive elements, drop-down navigation lists.** Using advanced features of CSS. Change display property of block and inline elements. Inline-block value. Creating popups and drop-down clouds and lists. Create drop-down navigation bar.	2	1	
12.	**Responsive design. Media query. Grid view. Using grid 12.** Introduction to responsive design. Different device display standards. Viewport property, RWD grid view, media queries. Specifications for image and video view in RWD. Create website layout using grid 12.	2	1	
13.	**Introduction to JavaScript** Javascript engine. History, introduction to EcmaScript, What is JavaScript and why we need to use it?	2	1	
14.	**JavaScript operators, loops** JS syntax, data types, operators, loops. Objects, json, events, strings, arrays, dates and try-catch	2	1	
15.	**Introduction to JavaScript libraries - jQuery** JavaScript frameworks, jQuery and plugins. Creating login, registration, welcome and dash pages using Html, Css and JavaScript.	2	1	

Evaluation criteria:

91 – 100 grades	excellent	A
81 – 90 grades	Very good	B
71 – 80 grades	good	C
61 – 70 grades	sufficient	D
51 – 60 grades	satisfactory	E
<51 grades	unsufficient	F

Instructor: Rasim Mahmudov

(Name, surname, middle name)

Signature:_____

Date: 07.09.2022