

Course Name : WEB Programing							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 211	B	Fall	3.00	0.00	1.00	3.50	5.00
Lecturer		Erjola Osmani, Msc					
Assistant							
Course language		Albanian					
Course level		Bachelor					
Description		This course will provide an overview of modern Web technologies. This course offers students sufficient knowledge to conceive of how the Web works, as well as sufficient ability to build a website with the necessary HTML, CSS, and JavaScript elements. Web technologies are delivered to students simultaneously in the theoretical and practical aspect, so that knowledge is as tangible as possible. This course will include HTML (Hypertext Markup Language), CSS (Cascading Style Sheets) and JavaScript.					
Objectives		Students at the end of the subject will be able to: • accurately conceptualise the functioning of the web with underlying technologies, client-server model, communication through certain protocols (HTTP, FTP), as well as HTTP request-response messages. • Conceive the main roles of the developer of a website, such as Information Architect, UX designer, UX designer, IxD Designer, Graphic Designer, Front-End and Back-End Developer. • markup a document with HTML tags such as <header>, <footer>, <main>,<section>, <h1>, <p>, , <a> etc. • design a Web page with CSS styling using properties such as padding, margin, background-color, border, background-image, hover, focus, color , display, text-align, etc. • build the structure (layout) of a web page using Flexbox • build Responsive webpages, etc.(@media{ }) • use some basic JavaScript functions to add interactivity to the webpage. • Publish the website on internet (hosting and establishing a domain).					
Core Concepts		Client-Server Model, HTTP Protocol, SFTP Protocol, HTTP , HTTP Messages Request-Response, URI, URL, IP address, Domain, Host, Server, Browser, Layout with FlexBox, Responsive Web, HTML tag, CSS Styling, Internal CSS, External CSS, Class & Id selector, Box-model, JQuery, JavaScript, Visual Studio Code					
Course Outline							
Week	Topic						
1	Web history. HTML5 structure, What is an HTML document, how to markup in HTML a text document with basic tags such as <head>, <body>, <p> , <h1> , tags and their types. etj. (HTML & CSS John Ducket faqe 21-40) . (Learning Web Design O'Reilly faqe 71-112;) (Class project: web page, Poetry Ndre Mjeda)						
2	How does the Web work? The difference between internet and the web. Formating Text using additional text marking attributes, such as font-family, color, font-size, background-color, etc. (; HTML & CSS John Ducket 40-61) (Class project: web page, Fun facts)						
3	URL address, IP address, HTTP protocol, and HTTP Request-Response messages. Images and ways of implementing them on a web page. Changing their size, their borders as well as positioning them in some basic positions(left, center, right). (HTML & CSS John Ducket page3-20) . (Learning Web Design O'Reilly page 131-159;) (Class project, website: 7 wonders of the world)						
4	The difference between the HTTP and FTP protocol in data transfer. Hyperlinks. Hyperlink a page with another web page, jump from one web page to another document. Application of hyperlinks over texts and images. (HTML - CSS John Ducket 74-93) . (Learning Web Design O'Reilly page 113-128;) (Class project, website: 7 wonders of the world)						

5	The client-server model in the search for a web information, the factors involved in this process and its realization. (Learning Web Design O'Reilly page 21-34) Tables, table implementation, and their adjustment according to the need of the web page. (HTML - CSS John Ducket pg 127-143) . (Learning Web Design O'Reilly page 163-173;) (Class project, website: 7 wonders of the world)
6	The designers of a web page. Basic concepts as well as the main roles of developing a website such as: Content Strategist, Information Architect, UX, UxI and UI Developers, website diagrams, visual designers, SEO, Front-end and back-end development of a website. . (Learning Web Design O'Reilly page 21-34;) Lists and forms. Lists "ordered" and "unordered", their implementation. Different types of forms such as text, checkbox, submit button, etc., specific usage of each type. (HTML - CSS John Ducket pp. 62-73 and 144-175) . (Learning Web Design O'Reilly page177-206;)
7	Entry to CSS3 (Cascading Style Sheets), CSS syntax and its interaction with HTML, internal and external CSS and their application, different Selector types and their use. (HTML - CSS John Ducket pp. 226-245) . (Learning Web Design O'Reilly page 239-259;)
8	Midterm Exam
9	The CSS hierarchy, as well as the application of CSS rules. Colors and background (Color mode, color selection as well as their use through hexadecimal and rgb code) (HTML & CSS John Ducket pp. 246-263) . (Learning Web Design O'Reilly page 303-351;)
10	Measuring units in the CSS, the usage and difference between them (px, rem,em). Text and the selection of fonts (Serif, Sans Serif, Monospace, Cursive, Fantasy). Styling text with CSS using: font-family, font-size, line- eight, letter-spacing, word-spacing, color, text-decoration, font-style, font-weight,etc. . (HTML - CSS John Ducket pp. 264-299) (Class project: Webpage, Bees.html)
11	Box-model, the application of this model in the elements of a web page. such as padding, margin, background-color, background-image, border, etc. Image formatting in CSS (HTML & CSS John Ducket pp. 300-329 and 407-427)(Class Project:Website, Watch Repair)
12	Layout of a web page and its navigation. Use of flexbox to build the structure of a web page. (HTML - CSS John Ducket pp. 358-405) . (Learning Web Design O'Reilly page 419-482;) (Class Project:Website Clock Repair)
13	Some basic Javascript functions as well as their use. (JavaScript and JQuery John Ducket pp. 53-144) . (Learning Web Design O'Reilly page 593-619;)
14	Javascript and DOM system (Document Object Model) (JavaScript and JQuery John Ducket pp. 183-242). (Learning Web Design O'Reilly page 621-632;)
15	Project submission and presentation: Implementing a website
16	Final Exam
Prerequisites	
The student must attend the course at a minimum rate of 75%.	
Literature	
• John Ducket HTML & CSS, Design and Build Websites; 18th Edition, 2011 • Learning Web Design O'Reilly, Jeniffer Niederst Robbins, 5th Edition, 2018	
References	
• Jon Ducket, JavaScript and JQuery; • Paul Wilton and Jeremy MvPeak, Beginning JavaScript, 3rd Edition, 2007, Wiley. • John Ducket, Wiley, Beginning Web Programming with HTML, XHTML, and CSS, 1st Edition, 2004.	
Course Outcome	
1	Understand the basics and concepts of web technology.
2	developing a website composed of several pages, designing it in CSS and adding interactivity with javascript
3	Understanding web technologies on Client and Server side

Course Evaluation			
In-term Studies	Quantity	Percentage	
Midterms	1	30	
Quizzes	0	0	
Projects	3	3	
Term Projects	1	20	
Laboratory	0	0	
Class Participation	1	10	
Total in-term evaluation percent			63
Final exam percent			37
Total			100
ECTS Workload (Based on Student Workload)			
Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	3	42
Duties	4	3	12
Midterms	1	2	2
Final Exam	1	2	2
Other	1	3	3
Total Work Load			125
Total Work Load / 25 (hours)			5.00
ECTS			5.00