MONTREAL COLLEGE IT

AEC WEB DEVELOPMENT AND DIGITAL MARKETING LEA.CX

Web Development and Digital Marketing

Course title:

FRONT END DEVELOPMENT FOR MOBILE AND RESPONSIVE WEB DESIGNS

420-MN3-UM

90 hours (2.67 units)
Weighting of course: 3-3-2

HOURS		
Theory	Practice	Study at home
45	45	30

Semester: Winter 2020

COURSE OUTLINE

This is the 2nd course in the Program

Course code	Course Title	Theory hours	Lab hours	Total
420-MN2-UM	Graphic Design for Web	30	30	60
420-MN3-UM	Front End Development for Mobile and Responsive Web Designs	45	45	90
420-MN4-UM	CMS Platforms for Web Application Development	30	45	75
420-MN5-UM	Fundamentals of Digital Marketing	30	30	60
420-MN6-UM	SEO & PPC - Outbound Marketing	45	45	90
420-MN7-UM	Social Media Marketing	45	45	90
420-MN8-UM	Web Analytics and Conversion Optimization	30	60	90
420-PNM-UM	Project	0	600	600
		285	915	1200

COURSE DESCRIPTION

This course introduces essential front end web development languages, focusing mainly on HTML, CSS and JavaScript. Course content explores front-end web development best practices and the purpose of responsive web design. At the end of the course students will be able to create responsive web pages with HTML, apply basic formatting styles using CSS and understand JavaScript for basic interactivity.

AFTER SUCCESSFULLY COMPLETING THIS COURSE, THE STUDENT WILL HAVE PARTIALLY[1] ACHIEVED THE FOLLOWING OBJECTIVES (SKILLS) AND THEIR ELEMENTS:

Objective code	Objective Description	Elements of the Objectives
YC02	**Apply a development approach by objects**	✓ **Analyze the characteristics of users.** ✓ **Establish the interaction characteristics.** ✓ **Choose input and output devices.** ✓ **Plan the overall organization of the interface** ✓ **Perform programming of the user interface**
YC03	**Correct programs**	✓ **Identify the problem** ✓ **Determine the nature of the problem** ✓ **Correct the problem.** ✓ **Validate the correction.** ✓ **Make corrections to the documentation.**
017A	**Implement an Application**	✓ **Plan the implementation** ✓ **Set up the environment.** ✓ **Validate the quality of the implementation** ✓ **Monitor the implementation** ✓ **Produce the exploitation guide**
YC05	**Design a hypermedia application in internal and global networks**	✓ **Establish the features of the application.** ✓ **Establish the technological framework.** ✓ **Prepare the work and development of the application.** ✓ **Produce the presentation prototype.** ✓ **Produce the communication prototype.** ✓ **Develop the application** ✓ **Produce the documentation for the application**

COURSE PLANNING

CLASS	SUBJECT	HOURS
1	**Introduction to the concepts of Web, Markup Language and HTML.**	3.5
Lab 01	Exercise 1 & 2: Creating documents using HTML	3
2	**Introduction to Core HTML elements** • Attributes • Formatting text • Core Elements	3.5
Lab 02	Exercise 3: Working with Text Formats Exercise 4: Working with Images, Links, Tables and Lists in HTML	3
3	**Introduction to CSS** • CSS Syntax • Adding style to HTML • Working with Colors • Formatting Text with CSS	3.5
Lab 03	Exercise 5: Adding CSS to HTML, working with colors Exercise 6: Testing the use of text and fonts styles	3
4	**CSS Properties** • Working with Backgrounds • CSS Height/width • Styling Borders **Using HTML Blocks** • Using blocks •CSS Combinators • Using Overflow • List Styles	3.5
Lab 04	Exercise 7: Testing the use of background styles, border, margin & padding styles, Link states styles Exercise 8: Using HTML Blocks Exercise Exercise 9: CSS Layouts & Combinators	3
5	**Mid-Term Exam**	3
Lab 05	**Mid-Term Exam**	3
6	**Introduction to JavaScript** • Scripts •Introduction to programming • Introduction to JavaScript	3.5
Lab 06	Exercise 10: Creating a JavaScript script Exercise 11: Using alerts and Window properties	3
7	**Program Structure in JavaScript** • JavaScript Syntax •Document Object Model (DOM) • Adding JavaScript to HTML	3.5
Lab 07	Exercise 12 - Using DOM	3
8	**Building Blocks of a Program** • Using Variables • Data Types • Arithmetic Operations • Using Functions	3.5
Lab 08	Exercise 13 - Using Math Exercise 14 - Using Functions	3
9	**Flow of Control in a Program** • Comparison Operators • Logical Operators • Decision making concepts • Control flow statements • Working with Loops	3.5
Lab 09	Exercise 14 - Using strings and Arrays Exercise 15 - Using conditionals Exercise 16 - Using loops	3
10	**Document Object Model (DOM)** • DOM Nodes • Using the childNodes collection • Node Properties • Element's attributes	3.5
Lab 10	Exercise 17 - Testing the use of childNodes, nodeValue, nodeType and nodeName in JavaScript Exercise 18 - Setting and reading element's attributes	3
11	**Responsive HTML**	3.5

	• Using Viewport • Building a Responsive Grid-View • Responsive Web Design - Frameworks	
Lab 11	Exercise 19 - Creating Responsive HTML documents	3
12	**Introduction to Bootstrap** • Getting Bootstrap • The grid system • Using the grid structure **Bootstrap Elements & Navigation** • Typography • Colors & Borders • Images • Navigation elements	3.5
Lab 12	Exercise 20: Create a simple response design using bootstrap and its grid system Exercise 21: Create a simple response design using bootstrap's: Buttons, Images, Borders, Colors, Typography Exercise 22: Using Dropdowns and Button groups in Bootstrap Exercise 23: Create a simple response design using bootstrap tables	3
13	**Final Exam**	3

Notes regarding online classes as per Article 1 and Article 20 of the College Education Regulations of Québec (RREC):

- The number of classes and hours per each class described in the above plan may vary for courses delivered temporarily online. Online courses are consisted of live sessions delivered by instructors, as well as extra activities through the Learning Management System under the instructor guidance/supervision.

- Instructors will be providing students with more details regarding learning activities as classes resume.

- The duration of your program and respective courses is still the same.

- Students are encouraged to interact with instructors through Omnivox, as it will continue to be the main platform for sharing content and providing assignments, among other activities.

- Examinations will be held in an online format. Instructors will be providing more details as classes start.

WEIGHTING OF THE SUMMATIVE EVALUATIONS

Midterm 20%
Mini project/Assignment – 30%(2 weeks)
Final Exam 50%

100% Total 60% is the passing grade+All 3 components above are mandatory for passing

RECOMMENDED READINGS AND MEDIA

- Head First HTML and CSS, 2nd Edition (Elisabeth Robson and Eric Freeman, O'Reilly)
- HTML, CSS and JavaScript All in One, Sams Teach Yourself: Covering HTML5, CSS3, and jQuery, Second Edition (Julie C. Meloni, Sams)
- JavaScript in 24 Hours, Sams Teach Yourself, Sixth Edition (Phil Ballard, Sams)
- https://www.w3schools.com/

TEACHING METHODOLOGY

This course has a total of 90 hours of theoretical and practical training. The training consists of different components: lecture, practice, formative assessment, demonstrative, etc. The material is seen in class. The student

is expected to do homework at home. The nature and content of the Project will be explained during the semester at the Teacher's discretion.

The Student is responsible for reading the *Institutional Policy on the Evaluation of Student Achievement* (IPESA).

TEACHER'S COORDINATES

Name: Arun Varghese

Please e-mail the instructor on MIO using Omnivox