Course Outline

Full-Stack Developer – LEA.BN

A. General Information

Course title	**User Interfaces**
Course number	420-WC4-AB
Hours	60
Ponderation *Ratio of lecture, practical and homework hours*	2-2-3
Credits	2.33
Competency statement(s) and code(s)	00ST Develop non-transactional Web applications. Element 6 only: 00ST.6 Program the client-side application logic.
Prerequisite (s)	420-WB4-AB Web Design 420-SA5-AB Database
Cohort	FSD-10
Start date	2023/09/07
End date	2023/09/22
Day(s) and times	M-F 9h00-12h00 12h30-14h30
Classroom/lab number	Online - Teams
Semester	Fall 2023
Teacher	Stephanie Moreau
Teachers' contact info	Teams
Course format (F2F, online, hybrid)	Online

B. Introduction

This course is part of the Full-Stack Developer program leading to an Attestation of Collegial Studies (A.E.C.). It should be taken in the Second semester of the program.

This course continues developing website design skills by utilizing JavaScript scripting language that enables Web Designers to develop highly interactive Web-based user interfaces. Students will learn how to use JavaScript for modifying the Document Object Model, event handling, controlling animation, forms verification, timers and counters. The course will then focus on additional libraries. The jQuery library will be used to add GUI widgets, apply effects, make server-side requests, and handle incoming data. A JavaScript framework will be introduced to assist in building user interfaces

C. Course Objectives

By the end of this course, students should be able to perform the following:

00ST	
Statement of the Competency	**Achievement Context**
Develop non-transactional Web applications.	• For Web applications associated with information delivery, marketing, etc. • For new applications and applications to be modified • Based on design documents • Using images • Using issue tracking and version control procedures
Elements of the Competency	**Performance Criteria**
6. Program the client-side application logic.	• Correct manipulation of DOM objects • Proper programming of interactions between the Web interface and the user • Proper programming and integration of animations and widgets

D. Evaluation Plan

Evaluation task	%	Approximate date	Link to competency and element	Select if part of the final evaluation!
Assignment #1	10%	**Class 7**	6	☐
Assignment #2	10%	**Class 10**	6	☐
Test #1	15%	**Class 4**	6	☐
Test #2	15%	**Class 9**	6	☐
Test #3	20%	**Class 12**	6	☒
Project	30%	**Class 11**	6	☒

E. Course Content and Schedule

Course Content

Introduction to JavaScript
Introduction to User Interfaces
Modifying the Document Object Model
Event handling
Controlling animation
Validating Forms
jQuery
AJAX

Schedule

Date or class	Topic(s)	Additional info	F2F	Online
Class 1	Introduction to JavaScript		☐	☐
Class 2	Control Structures and Functions		☐	☐
Class 3	JavaScript Built-in Objects		☐	☐
Class 4	Test #1		☐	☐
Class 5	Browser Object Model (BOM)		☐	☐
Class 6	Document Object Model (DOM)		☐	☐
Class 7	Enhancing and Validating Forms		☐	☐
Class 8	Test #2		☐	☐
Class 9	Introduction to jQuery		☐	☐
Class 10	AJAX Foundations		☐	☐
Class 11	Presentations		☐	☐
Class 12	Test #3		☐	☐

F. Required Textbooks / Materials / Costs

Title / Item	Cost $
Technical requirements for this course (hardware, software, High speed Internet connection, etc.)	

G. Bibliography (books, articles, videos, websites, podcasts, etc.)

Marjin Javerbeke, *Eloquent JavaScript*, Third Edition, No Starch Press, 2018
T. J. Crowder. *JavaScript: The New Toys*, John Wiley & Sons, Inc, 2017
Mark Myers. *A Smarter Way to Learn JavaScript*, CreateSpace Independent Publishing Platform, 2014

H. Teaching Methods

The course is a combination of theory and labs. Students will:

- Work alone
- Work in groups

The course requires your individual presence and your active, consistent and sustained participation in your individual work.
Your individual responsibilities are to complete the work assigned and be ready to work at the start of each class. Léa, the course management system within Omnivox, will be used in this course.

Learning Activities:

- Lectures/Demonstrations: Discussion is encouraged as is student-procured, outside material relevant to topics being covered.
- Hands-On Exercises/Assignment/Project: Case problems, concepts reviews, and skills practice, will help support and reinforce material in the course. These will be structured to be as realistic as possible given the time available.
- Tests
- Group Project
- Classroom Activity: Participation and Discussion

I. Departmental Policies and Classroom Policies

Classroom Policies

Late submission of work

Work submitted late will result in a 10% deduction from the grade, per calendar day.

Classroom behaviour

Online etiquette

Departmental Policies

Please refer to the following document concerning policies in place at the Centre for Continuing Education:

Continuing Education Policies and Guidelines

J. College Policies

Please refer to the following document which summarizes some of the key policies in place at the College. See the specific policies for more information.

Summary of College Policies and Guidelines

Please refer to the following document concerning the provisos related to course outlines as a response to Covid-19.

Provisos for Course Outlines (Covid-19)

Topic	Policy or Guideline (click link)	Article (if applicable)
Student Rights and Responsibilities	Policy 7: Institutional Policy on the Evaluation of Student Achievement (IPESA)	See articles 3.2 and 3.3.
Changes to Course Evaluation Plan in the Course Outline		See article 3.1 and 5.3.
Religious Holidays		See articles 3.2 and 4.1.
Cheating and plagiarism		See articles 9.1 and 9.2.
	Academic Integrity: Cheating and Plagiarism Procedure	
Student Code of Conduct	Policy 13: Policy on Student Conduct and Discipline Procedures (September 15, 2009)	