Lambton College

CSD-2103 Front-End Development II

Computer Studies

Course Number:	**Co-Requisites:**	**Pre-Requisites:**
CSD-2103	N/A	CSD-1103 and CSD-1133 and CSD-1233
Prepared by:	Mark Russell, Professor	
Approved by:	Chris Slade, Senior Dean	
Approval Date:	Wednesday, June 16, 2021	
Approved for Academic Year:	2021-2022	
Credit Weight:	3.00	

Course Description

As a continuation of Front-End Web Development I, JavaScript and jQuery are introduced. Students (1) implement JavaScript and jQuery to enrich the user experience; (2) employ AJAX to allow server-side requests to exchange data with a Web server; (3) employ JSON as an over-the-network data format; and (4) implement APIs from popular websites to enhance a web page. Students add to their term project from Front-End Web Development I by designing and implementing MVC applications that includes client-side, server-side, and database processing.

Course Learning Outcomes/Course Objectives

1. Implement JavaScript to enrich the user experience

    1.1   Implement HTML5 controls and attributes for getting and validating user entrie

    1.2   Use primitive data types to work with data

    1.3   Use objects to work with data

    1.4   Apply DOM scripting properties and methods

2. Implement jQuery library functions and plug-ins to enrich user experience

    2.1   Employ jQuery to work with forms

    2.2   Implement the validation plugin to validate data in a form and submit data to a server for processing

    2.3   Employ plugins to enhance a webpage

    2.4   Find and employ a plugin

    2.5   Implement jQuery widgets in web pages

    2.6   Implement jQuery UI and the four type of components it provides

2.7   Implement jQuery UI themes and widgets

2.8   Implement jQuery UI interfactions or effects in web pages

2.9   Employ jQuery UI interactions

2.10   Employ jQuery UI effects

3. **Design and construct a web page for mobile devices**

    3.1   Employ viewport meta elements for mobile devices

    3.2   Employ testing pages for a mobile site and full website

    3.3   Employ responsive design in building mobile web sites

    3.4   Employ grides, collapsible content blocks and collapsible sets

4. **Implement APIs from popular websites to enhance a web page**

    4.1   Implement Ajax and JSON to display the data on your webpages and provide links for viewing the photos

    4.2   Employ Ajax and JSON with the API for Google Maps to get display markers and messages on a map, and display driving directions on a web page.

Relationship to Essential Employability Skills

This course contributes to your program by helping you achieve the following Essential Employability Skills:

EES 1.1   Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience. (T, A,)

EES 1.2   Respond to written, spoken or visual messages in a manner that ensures effective communication. (T, A,)

EES 2.3   Execute mathematical operations accurately. (T, A,)

EES 3.4   Apply a systematic approach to solve problems. (T, A,)

EES 3.5   Use a variety of thinking skills to anticipate and solve problems. (T, A,)

EES 4.6   Locate, select, organize and document information using appropriate technology and information systems. (T, A,)

EES 4.7   Analyze, evaluate and apply relevant information from a variety of sources. (T, A,)

EES 6.10   Manage the use of time and other resources to complete projects. (T, A,)

EES 6.11   Take responsibility for one's own actions, decisions and consequences. (T, A,)

Relationship to Vocational Learning Outcomes

This course provides the opportunity for you to achieve the following Program Vocational Learning Outcomes (VLO) which will be taught and evaluated at an taught (T), assessed (A) or culminating peformance (CP) level:

CPRO - Computer Programmer

VLO 2	Contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools. (T, A)
VLO 3	Implement and maintain secure computing environments. (T, A)
VLO 6	Select and apply strategies for personal and professional development to enhance work performance. (T, A)

CSAC - Computer Software and Database Development

VLO 3	Deploy software applications for multiple devices and multiple operating systems. (T, A)

Learning Resources

Required

Ruvalcaba, Z. and Delamater, M. (2017). Murach's JavaScript and jQuery. (3rd ed.). Fresno, CA: Mike Murach & Associates, Inc. • • ISBN: 978-1-943872-05-3

Supplemental

None

Student Evaluation

Testing - 50%
Quizzes (4 @ 2.5%) - 10%
Tests (2 @ 20%) - 40%
Assignments - 50%
10 Assignments (evenly weighted) - 25%
Term Project & Presentation - 25%

Prior Learning Assessment and Recognition

Students who wish to apply for prior learning assessment and recognition (PLAR) need to demonstrate competency at a post-secondary level in all of the course learning requirements outlined above. Evidence of learning achievement for PLAR candidates includes:

- Other: Students interested in PLAR consideration are advised to discuss details with the program coordinator

Course Related Information

Courses with CSD course codes have program policies related to evaluations and classroom conduct. These program policies for the CSD courses are available in D2L and students are expected to be aware of these policies.

This is a project-based learning course consisting of a variety of teaching environments. All course work is completed according to the syllabus. Students should take careful notes as not all material can be found in the textbook or handout materials. Students are encouraged to go through the material before class and participate actively in class. Attendance is expected and necessary to be successful.

College Related Information

Academic Integrity

Lambton College is committed to high ethical standards in all academic activities within the College, including research, reporting and learning assessment (e.g. tests, lab reports, essays).

The cornerstone of academic integrity and professional reputation is principled conduct. All scholastic and academic activity must be free of all forms of academic dishonesty, including copying, plagiarism and cheating.

Lambton College will not tolerate any academic dishonesty, a position reflected in Lambton College policies. Students should be familiar with the Students Rights and Responsibilities Policy, located at lambtoncollege.ca. The policy states details concerning academic dishonesty and the penalties for dishonesty and unethical conduct.

Questions regarding this policy, or requests for additional clarification, should be directed to the Lambton College Student Success Department.

Students with Disabilities

If you are a student with a disability please identify your needs to the professor and/or the Accessibility Centre so that support services can be arranged for you. You can do this by making an appointment at the Accessibility Centre or by arranging a personal interview with the professor to discuss your needs.

Student Rights and Responsibility Policy

Acceptable behaviour in class is established by the instructor and is expected of all students. Any form of misbehaviour, harassment or violence will not be tolerated. Action will be taken as outlined in Lambton College policy.

Date of Withdrawal without Academic Penalty

Please consult the Academic Regulations and Registrar's published dates.

Waiver of Responsibility

Every attempt has been made to ensure the accuracy of this information as of the date of publication. The content may be modified, without notice, as deemed appropriate by the College.

Students should note policies may differ depending on the location of course offering. Please refer to campus location specific policies:

LAMBTON COLLEGE POLICIES – applicable to all Lambton College students.
- Student Rights & Responsibilities & Discipline policy (2000-5-1)
- Test & Exam Writing Protocol (2000-1-6)
- Evaluation of Students (2000-1-3)
- (https://www.lambtoncollege.ca/custom/Pages/Policies/Policies.aspx)

CESTAR COLLEGE:
- https://www.lambtoncollege.ca/Programs/International/Lambton_in_Toronto/Student_Policies/

QUEENS COLLEGE:
- https://www.lambtoncollege.ca/Programs/International/Lambton_in_Mississauga/Student_Policies/

Note: It is the student's responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.