

CSD-1103 Front-End Web Development I

Computer Studies

Course Number: Co-Requisites: Pre-Requisites:

CSD-1103 N/A N/A

Prepared by: Aaron Sarson, Coordinator Approved by: Chris Slade, Senior Dean Thursday, May 19, 2022

Approved for Academic Year: 2022-2023 Credit Weight: 3.00

Course Description

Students integrate modern web technologies to (1) create web pages using HTML; (2) implement Cascading Style Sheets (CSS) to format web pages; and (3) design and publish a website. As a term project, students complete all phases of website development and publish their website to an IBM cloud server.

Course Learning Outcomes/Course Objectives

1. Create web pages using HTML

- 1.1 Apply HTML elements and attributes to create and structure web pages
- 1.2 Employ web authoring tools
- 1.3 Apply structural and semantic elements
- 1.4 Apply symbol and other character entities
- 1.5 Validate HTML documents
- 1.6 Integrate links into a webpage
- 1.7 Integrate images into a website
- 1.8 Apply the DIV element
- 1.9 Apply the heading element
- 1.10 Integrate lists into a webpage
- 1.11 Employ responsive design techniques
- 1.12 Employ media queries to design for tablet and desktop viewports
- 1.13 Apply HTML5 structural elements to redesign a website
- 1.14 Apply HTML5 semantic elements

- 1.15 Implement tables to organize tabular data
- 1.16 Implement forms with HTML5 validation
- 1.17 Integrate audio and video into a webpage

2. Implement Cascading Style Sheets (CSS) to format web pages

- 2.1 Integrate inline, embedded, and external style sheets
- 2.2 Implement the CSS box model
- 2.3 Link an HTML document to an external style sheet
- 2.4 Create style rules for structural elements
- 2.5 Create style rules for classes
- 2.6 Apply styles to lists, tables and forms
- 2.7 Add comments to CSS files
- 2.8 Validate a CSS file

3. Design and publish a website

- 3.1 Create the website folder structure and files on a remote website server
- 3.2 Design, build, and publish a website

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 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's), which will be taught and evaluated at a taught (T), assessed (A) or culminating performance (CP) level:

CPCM - Computer Programmer

VLO 1 Identify, analyze, develop, implement, verify and document the requirements for a computing environment. (T, A)

- VLO 6 Select and apply strategies for personal and professional development to enhance work performance. (T, A)
- VLO 9 Support the analysis and definition of software system specifications based on functional and non-functional requirements. (T, A)
- VLO 10 Contribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks. (T, A)

CPCT - Computer Programmer

- VLO 1 Identify, analyze, develop, implement, verify and document the requirements for a computing environment. (T, A)
- VLO 6 Select and apply strategies for personal and professional development to enhance work performance. (T, A)
- VLO 9 Support the analysis and definition of software system specifications based on functional and non-functional requirements. (T, A)
- VLO 10 Contribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks. (T, A)

CPRO - Computer Programmer

- VLO 1 Identify, analyze, develop, implement, verify and document the requirements for a computing environment. (T, A)
- VLO 6 Select and apply strategies for personal and professional development to enhance work performance. (T, A)
- VLO 9 Support the analysis and definition of software system specifications based on functional and non-functional requirements. (T, A)
- VLO 10 Contribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks. (T, A)

CSAC - Computer Software and Database Development

- VLO 1 Evaluate system requirements and implement multi-tiered (client, server, and database) web applications to meet client requirements. (T, A)
- VLO 3 Deploy software applications for multiple devices and multiple operating systems. (T, A)

CSAM - Computer Software and Database Development

- VLO 1 Evaluate system requirements and implement multi-tiered (client, server, and database) web applications to meet client requirements. (T, A)
- VLO 3 Deploy software applications for multiple devices and multiple operating systems. (T, A)

CSAT - Computer Software and Database Development

- VLO 1 Evaluate system requirements and implement multi-tiered (client, server, and database) web applications to meet client requirements. (T, A)
- VLO 3 Deploy software applications for multiple devices and multiple operating systems. (T, A)

FSDM - Full Stack Software Development

- VLO 1 Evaluate system requirements and implement full stack (client, server, and database) web applications to meet client requirements. (T, A)
- VLO 3 Implement program logic through the use of various programming paradigms (i.e. procedural, object-oriented, functional) that are supported by industry standard programming languages. (T, A)

FSDS - Full Stack Software Development

VLO 1	Evaluate system requirements and implement full stack (client, server, and database) web
	applications to meet client requirements. (T, A)

VLO 3 Implement program logic through the use of various programming paradigms (i.e. procedural, object-oriented, functional) that are supported by industry standard programming languages. (T, A)

FSDT - Full Stack Software Development

VLO 1	Evaluate system requirements and implement full stack (client, server, and database) web
	applications to meet client requirements. (T, A)

VLO 3 Implement program logic through the use of various programming paradigms (i.e. procedural, object-oriented, functional) that are supported by industry standard programming languages. (T, A)

Learning Resources

Required

Minnick, J. (2017). Web Design with HTML5 & CSS3, Complete. (8th ed.) Boston, MA: Cengage Learning.

Paperback ISBN: 978-1-305-57817-3

eBook ISBN: 978-1-337-41065-6 (https://campus-shop.lambtoncollege.ca)

Student Evaluation

Term Project (Design & Build Website) — 25%

Tests (2 @ 20% each) — 40%

Quizzes (5 @ 3% each) — 15%

Practice Exercises (5 @ 4% each) — 20%

Grade Scheme

The round off mathematical principle will be used. Percentages are converted to letter grades and grade points as follows:

Mark (%)	Grade	Grade Point	Mark (%)	Grade	Grade Point
94-100	A+	4.0	67-69	C+	2.3
87-93	Α	3.7	63-66	С	2.0
80-86	A-	3.5	60-62	C-	1.7
77-79	B+	3.2	50-59	D	1.0
73-76	В	3.0	0-49	F	0.0
70-72	B-	2.7			

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

Refer to Program Related Information

College Related Information

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.

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)
- Policy Link https://www.lambtoncollege.ca/custom/Pages/Policies/Policies.aspx

CESTAR COLLEGE:

• https://www.lambtoncollege.ca/Programs/International/Lambton_in_Toronto/Student_Policies-17179868204/
QUEENS COLLEGE:

• https://www.lambtoncollege.ca/Programs/International/Lambton_in_Mississauga/Student_Policies-17179868190/