Course Outline

Course Name: Front-End Web Development (HTTP 5122)

Academic Year: 2025-2026

Faculty:

Faculty Availability:

Associate Dean:
Ahmed Sagarwala
ahmed.sagarwala@humber.ca

Schedule Type Code:

Land Acknowledgement

Humber College is located within the traditional and treaty lands of the Mississaugas of the Credit. Known as Adoobiigok [A-doe-bee-goke], the “Place of the Alders” in Michi Saagiig [Mi-Chee Saw-Geeg] language, the region is uniquely situated along Humber River Watershed, which historically provided an integral connection for Anishinaabe [Ah-nish-nah-bay], Haudenosaunee [Hoeden-no-shownee], and Wendat [Wine-Dot] peoples between the Ontario Lakeshore and the Lake Simcoe/Georgian Bay regions. Now home to people of numerous nations, Adoobiigok continues to provide a vital source of interconnection for all.

Equity, Diversity and Inclusion Statement

Humber College and the University of Guelph-Humber (Humber) are leaders in providing a learning, working and living environment that recognizes and values equity, diversity and inclusion in all its programs and services. Humber commits to reflect the diversity of the communities the College serves. Students, faculty, support and administrative staff feel a sense of belonging and have opportunities to be their authentic selves.

Faculty	
Program	Web Development (11491)
Course Name:	Front-End Web Development (HTTP 5122)
Pre-Requisite(s)	none
Co-Requisite(s)	none
Equates	none
Restrictions	none
Credit Value	3
Total Course Hours	42

Developed By: Prepared By: Approved by

Ahmed Sagarwala

Humber Learning Outcomes (HLOs) in this course.

The HLOs are a cross-institutional learning outcomes strategy aimed at equipping Humber graduates with the employability skills, mindsets, and values they need to succeed in the future of work. To explore all the HLOs, please consult the Humber Learning Outcomes framework.

- Sustainability
- Systems Thinking
- Indigenous Ways of Being Knowing and Doing (IWBKD)
- Critical Thinking
- Communication
- Digital Fluency
- Professionalism
- Strategic Problem-Solving

Course Description

This course delivers the fundamentals of computer programming and introduces the tools for creating interactive web pages using the JavaScript programming language.

Course Rationale

JavaScript is the key to creating interactive web applications. A strong foundation in computer programming skills with JavaScript technologies is a requirement for front-end web developers seeking to work in industry-standard front-end libraries and frameworks.

Program Learning Outcomes (PLOs) Emphasized in this Course

Web Development (11491)

1. Determine and document requirements for web computing projects based on the effective application of stakeholder needs.
2. Prepare and present proposals and business plans for web applications that satisfy stakeholder requirements.
3. Design, model, implement and optimize accessible* web solutions to meet client requirements and constraints, and align with standards and best practices.
4. Develop the appropriate information architecture in order to satisfy a broad range of requirements and enhance the user experience.
5. Test, troubleshoot and debug web applications to support requirements and meet Quality Assurance objectives.
6. Select and apply strategies for personal and professional development to enhance work performance.

Course Learning Method(s)

- Problem Based Learning (PBL)
- Project Based Learning
- Lecture

Course Learning Outcomes (CLO)

Learning Outcome	Summative Assessments
Integrate JavaScript logic into a web application.	• Coding Assignment (x5) • Final Project Assessment Details: A culminating assessment for the course.
Create JavaScript programming logic using various coding structures and techniques.	• Coding Assignment (x5) • Final Project Assessment Details: A culminating assessment for the course.
Accept popular JavaScript libraries or APIs into a web application to extend functionality.	• Coding Assignment (x5)
Create or complete interactive applications that leverage JavaScript technologies.	• Coding Assignment (x5) • Final Project Assessment Details: A culminating assessment for the course.
Analyze and troubleshoot code to "debug" runtime, syntax and logic errors.	• Midterm Debugging Challenge Assessment Details: A midterm exam to test debugging abilities. • Final Project Assessment Details: A culminating assessment for the course. • Coding Assignment (x5)

Assessment Weighting

Assessment	Weight
Applied Project	
Final Project	15%
Milestone Check-ins	
Project Milestone (x3)	5%
Programming Challenge	
In-Class Lab Exercise (x12)	30%
Coding Assignment (x5)	40%
Midterm Exam	

Assessment	Weight
Midterm Debugging Challenge	10%
Total	100%

Modules of Study

Module	Course Learning Outcomes	Resources	Assessments
Introduction to JavaScript	• Integrate JavaScript logic into a web application.	W3Schools (n.d.). W3Schools Online Web Tutorials. Retrieved from https://www.w3schools.com/ Mozilla Developer Network (n.d.). MDN Web Docs. Retrieved from https://developer.mozilla.org/en-US/ Duckett, J. (2014). JavaScript and jQuery: Interactive front-end web development. Wiley Publishing. NOTE: This book is available in digital format through the Humber College library. Visual Studio Code software (or another text editor for code, such as Notepad++ or Sublime).	• In-Class Lab Exercise (x12)
Programming Fundamentals in JavaScript	• Integrate JavaScript logic into a web application. • Create JavaScript programming logic using various coding structures and techniques. • Analyze and troubleshoot code to "debug" runtime, syntax and logic errors.	Visual Studio Code software (or another text editor for code, such as Notepad++ or Sublime).	• Midterm Debugging Challenge • In-Class Lab Exercise (x12) • Coding Assignment (x5)

Module	Course Learning Outcomes	Resources	Assessments
Interactive Programming with the DOM	• Integrate JavaScript logic into a web application. • Create JavaScript programming logic using various coding structures and techniques. • Create or complete interactive applications that leverage JavaScript technologies.	W3Schools (n.d.). W3Schools Online Web Tutorials. Retrieved from https://www.w3schools.com/ Mozilla Developer Network (n.d.). MDN Web Docs. Retrieved from https://developer.mozilla.org/en-US/ Duckett, J. (2014). JavaScript and jQuery: Interactive front-end web development. Wiley Publishing. NOTE: This book is available in digital format through the Humber College library. Visual Studio Code software (or another text editor for code, such as Notepad++ or Sublime).	• In-Class Lab Exercise (x12) • Coding Assignment (x5)

Module	Course Learning Outcomes	Resources	Assessments
Intermediate JavaScript Techniques	• Integrate JavaScript logic into a web application. • Create JavaScript programming logic using various coding structures and techniques. • Create or complete interactive applications that leverage JavaScript technologies.	W3Schools (n.d.). W3Schools Online Web Tutorials. Retrieved from https://www.w3schools.com/ Mozilla Developer Network (n.d.). MDN Web Docs. Retrieved from https://developer.mozilla.org/en-US/ Duckett, J. (2014). JavaScript and jQuery: Interactive front-end web development. Wiley Publishing. NOTE: This book is available in digital format through the Humber College library. Visual Studio Code software (or another text editor for code, such as Notepad++ or Sublime). Web Hosting that meets program standards (speak with your instructor for details).	• In-Class Lab Exercise (x12) • Coding Assignment (x5) • Project Milestone (x3) • Final Project

Module	Course Learning Outcomes	Resources	Assessments
Introduction to APIs	• Integrate JavaScript logic into a web application. • Create JavaScript programming logic using various coding structures and techniques. • Accept popular JavaScript libraries or APIs into a web application to extend functionality. • Create or complete interactive applications that leverage JavaScript technologies.	W3Schools (n.d.). W3Schools Online Web Tutorials. Retrieved from https://www.w3schools.com/ Mozilla Developer Network (n.d.). MDN Web Docs. Retrieved from https://developer.mozilla.org/en-US/ Duckett, J. (2014). JavaScript and jQuery: Interactive front-end web development. Wiley Publishing. NOTE: This book is available in digital format through the Humber College library. Visual Studio Code software (or another text editor for code, such as Notepad++ or Sublime).	• In-Class Lab Exercise (x12) • Coding Assignment (x5)

Resource(s):

Course material costs can be found through the Humber Bookstore.

Supplemental Resources

Title	ISBN
Duckett, J. (2014). JavaScript and jQuery: Interactive front-end web development. Wiley Publishing. NOTE: This book is available in digital format through the Humber College library.	
Mozilla Developer Network (n.d.). MDN Web Docs. Retrieved from https://developer.mozilla.org/en-US/	
W3Schools (n.d.). W3Schools Online Web Tutorials. Retrieved from https://www.w3schools.com/	

Additional Tools and Equipment

- Visual Studio Code software (or another text editor for code, such as Notepad++ or Sublime).
- Web Hosting that meets program standards (speak with your instructor for details).

Essential Employability Skills

Section	Skills	Measurement	Details
Numeracy	• Understanding and applying mathematical concepts and reasoning • Analyzing and using numerical data • Conceptualizing	Teach and measure	• Learners will be challenged to manipulate numerical data in JavaScript logic. • Learners will be assessed in the practical application of these skills through labs, assignments and projects.
Critical Thinking and Problem-Solving	• Analysing • Synthesizing • Decision-Making • Creative and Innovative Thinking	Teach and measure	• Problem-solving approaches with a coding perspective will be taught. • Learners will be assessed in the practical application of these skills through labs, assignments and projects.
Information Management	• Gathering and managing information • Selecting and using appropriate tools and technology for a task or project • Computer literacy • Internet skills	Teach and measure	• Creating and managing data in various web contexts will be discussed each week. • Learners will be assessed in the practical application of these skills through labs, assignments and projects.

Prior Learning Assessment & Recognition (PLAR)

Prior Learning Assessment and Recognition (PLAR) is the formal evaluation and credit-granting process whereby candidates may obtain credits for prior learning. Prior learning includes the knowledge competencies and skills acquired, in both formal and informal ways, outside of post-secondary education. Candidates may have their prior learning evaluated against the course learning outcomes as defined in the course outline.

To find out if this course is eligible for PLAR, and how this learning would be assessed, please contact the Program Coordinator for more details.

Academic Regulations

It is the student's responsibility to be aware of the College Academic Regulations. The Academic Regulations apply to all applicants to Humber and all current students enrolled in any program or course offered by Humber, in any location. Information about academic appeals is found in the Academic Regulations.

Anti-Discrimination Statement

At Humber College, all forms of discrimination and harassment are prohibited. Students and employees have the right to study, live and work in an environment that is free from discrimination and harassment. If you need assistance on concerns related to discrimination and harassment, please contact the Centre for Human Rights, Equity and Inclusion or the Office of Student Conduct.

Accessible Learning Services

Humber strives to create a welcoming environment for all students where equity, diversity and inclusion are paramount. Accessible Learning Services facilitates equal access for students with disabilities by coordinating academic accommodations and services. Staff in Accessible Learning Services are available by appointment to

assess specific needs, provide referrals and arrange appropriate accommodations. If you require academic accommodations, contact:

Accessible Learning Services

North Campus: (416) 675-6622 X5090

Lakeshore Campus: (416) 675-6622 X3331

Academic Integrity

Academic integrity is essentially honesty in all academic endeavors. Academic integrity requires that students avoid all forms of academic misconduct or dishonesty, including plagiarism, cheating on tests or exams or any misrepresentation of academic accomplishment.

Disclaimer

While every effort is made by the professor/faculty to cover all material listed in the outline, the order, content, and/or evaluation may change in the event of special circumstances (e.g. time constraints due to inclement weather, sickness, college closure, technology/equipment problems or changes, etc.). In any such case, students will be given appropriate notification in writing, with approval from the Senior Dean (or designate) of the Faculty.

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See the Humber Libraries website for additional information regarding copyright and for details on allowable limits.
