Faculty: Joanna Kommala

Faculty Availability:

Associate Dean: Ahmed Sagarwala
ahmed.sagarwala@humber.ca
Schedule Type Code:

Course Outline

Course Name: Full-Stack Web Development (HTTP 5222)

Academic Period: 2024 - 2025

Land Acknowledgement

Humber College is located within the traditional and treaty lands of the Mississaugas of the Credit. Known as Adoobiigok [Adoe-bee-goke], the “Place of the Alders” in Michi Saagiig [Mi-Chee Saw-Geeg] language, the region is uniquely situated along the 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 or Department	Faculty of Media & Creative Arts
Program(s)	Web Development (11491)
Course Name:	Full-Stack Web Development (HTTP 5222)
Pre-Requisites	HTTP 5110 + (HTTP5121 and HTTP5122) or HTTP5111
Co-Requisites	none
Equates	none
Restrictions	none
Credit Value	3
Total Course Hours	42

Developed By: Joanna Kommala Prepared By: Sean Doyle

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.


Systems Thinking


Critical Thinking


Communication


Digital Fluency


Strategic Problem-Solving

Course Description

This course builds upon the JavaScript skills and techniques covered in the first term, employing a JavaScript framework to create server-side JavaScript web applications. Accessing alternate data sources (including APIs) completes this course leading to a full-stack JavaScript application deployed to the internet.

Course Rationale

The dominating trend in web development is full-stack JavaScript applications. Coupled with third-party data sources, these applications can provide robust features with profound user experiences.

Program Outcomes 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. Design, model, implement and optimize accessible web solutions to meet client requirements and constraints, and align with standards and best practices.
3. Implement a development process to support consistency between development platforms and production platforms.
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.

Course Learning Method(s)

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

Learning Outcomes

- Develop a web application using Node.js
- Integrate popular JavaScript libraries and frameworks into a web application
- Integrate API content into a web application using JavaScript, XML, and JSON

Assessment Weighting

Assessment	**Weight**
Lab Exercises (x8)	32%

Assignments (x2)	40%
Web Project Proposal	4%
Web Project	24%
Total	**100%**

Modules of Study

Module	Course Learning Outcomes	Resources	Assessments
Server Side JavaScript with Node.js	• Develop a web application using Node.js	As provided by faculty.	• In-Class Lab Exercise, Assignments, and Project
XML, JSON, and APIs	• Integrate API content into a web application using JavaScript, XML, and JSON	As provided by faculty.	• In-Class Lab Exercise, Assignments, and Project
JavaScript Libraries and Frameworks	• Develop a web application using Node.js • Integrate popular JavaScript libraries and frameworks into a web application	As provided by faculty.	• In-Class Lab Exercise, Assignments, and Project

Required Resources

React (n.d.). React. Retrieved from https://reactjs.org/

Firebase (n.d.). Firebase. Retrieved from https://firebase.google.com/

Node.js (n.d.). Node.js. Retrieved from https://nodejs.org/en/

Additional Tools and Equipment

- VS Code software (or another text editor for code, such as Notepad++ or Sublime)
- Web Hosting to Program Standards

Essential Skills

Section	Skills	Measurement	Details
Communication	• Reading	Reinforce and measure	• Lectures, exercises, group activities, and assignments. • Exercises, assignments, and projects.

Numeracy	• Understanding and applying mathematical concepts and reasoning	Teach and measure	• Lectures, exercises, group activities, and assignments. • Exercises, assignments, and projects.
Critical Thinking and Problem-Solving	• Analysing • Synthesising • Decision-Making • Creative and Innovative Thinking	Reinforce and measure	• Lectures, exercises, group activities, and assignments. • Exercises, 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	Reinforce and measure	• Lectures, exercises, group activities, and assignments. • Exercises, 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 Dean (or designate) of the School.

Copyright

Copyright is the exclusive legal right given to a creator to reproduce, publish, sell or distribute his/her work. All members of the Humber community are required to comply with Canadian copyright law which governs the reproduction, use and distribution of copyrighted materials. This means that the copying, use and distribution of copyright- protected materials, regardless of format, is subject to certain limits and restrictions. For example, photocopying or scanning an entire textbook is not allowed, nor is distributing a scanned book.

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