

# Course Outline

Course Name: Back-End Web Development 1 (HTTP 5125)

Academic Period: 2024 - 2025

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 [Adee-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:	Back-End Web Development 1 (HTTP 5125)
Pre-Requisites	none
Co-Requisites	none
Equates	none
Restrictions	none
Credit Value	3
Total Course Hours	42

Developed By: Christine Bittle 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



Digital Fluency



Strategic Problem-Solving

## Course Description

In this course, students are introduced to server-side web development with the C# programming language, and will implement techniques for creating data-driven websites drawing from various external data sources..

## Course Rationale

Competency in the strictly-typed C# language is a requirement for programming in the ASP.NET framework, and provides a foundation for other strictly-typed coding languages and frameworks.

## 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. 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

- Learn computer programming fundamentals in the C# language.
- Design data source architectures for use in web applications.
- Create an Application Programming Interface (API) data source.

## Assessment Weighting

Assessment	Weight
Coding Assignments (x2)	40%
Application Project (3 components x 20%)	60%
<b>Total</b>	<b>100%</b>

## Modules of Study

Module	Course Learning Outcomes	Resources	Assessments
Introduction to Web Applications	<ul style="list-style-type: none"><li>Learn computer programming fundamentals in the C# language.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
ASP.NET framework and WebAPI	<ul style="list-style-type: none"><li>Learn computer programming fundamentals in the C# language.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
HTTP Requests	<ul style="list-style-type: none"><li>Learn computer programming fundamentals in the C# language.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
Version Control with ASP.NET	<ul style="list-style-type: none"><li>Learn computer programming fundamentals in the C# language.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
Control Structures	<ul style="list-style-type: none"><li>Learn computer programming fundamentals in the C# language.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
Dynamic Web Pages	<ul style="list-style-type: none"><li>Learn computer programming fundamentals in the C# language.</li><li>Design data source architectures for use in web applications.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
Data Models & MVC	<ul style="list-style-type: none"><li>Design data source architectures for use in web applications.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>
Database Interactions with C#	<ul style="list-style-type: none"><li>Design data source architectures for use in web applications.</li><li>Create an Application Programming Interface (API) data source.</li></ul>	As provided by faculty.	<ul style="list-style-type: none"><li>Assignment and project</li></ul>

## Supplemental Resources

<p>Delamater, Mary and Boehm, Anne (2012). Murach’s ASP.NET 4.5 Web Programming with C#. Mike Murach &amp; Associates Inc. ISBN #: 978-1-890774-75-2</p> <p>Walther, Hoffman, and Dudek (2010). <i>ASP.NET 4 Unleashed</i>. Sams Publishing. ISBN #: 978-0-672331121.</p>
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# Additional Tools and Equipment

- Visual Studio Community Edition. NOTE: This is different from VS Code and needs to run on a Windows operating system. If you use a Mac OS, you will need dual-boot software such as Parallels to run Visual Studio.
- MAMP software

# Essential Skills

Section	Skills	Measurement	Details
Communication	<ul style="list-style-type: none"><li>• Reading</li><li>• Listening</li></ul>	Reinforce and measure	<ul style="list-style-type: none"><li>• Lectures, exercises, assignments, and projects.</li></ul>
Numeracy	<ul style="list-style-type: none"><li>• Understanding and applying mathematical concepts and reasoning</li><li>• Conceptualizing</li></ul>	Teach and measure	<ul style="list-style-type: none"><li>• Lectures, exercises, assignments, and projects.</li></ul>
Critical Thinking and Problem-Solving	<ul style="list-style-type: none"><li>• Analysing</li><li>• Synthesising</li><li>• Decision-Making</li><li>• Creative and Innovative Thinking</li></ul>	Teach and measure	<ul style="list-style-type: none"><li>• Lectures, exercises, assignments, and projects.</li></ul>
Information Management	<ul style="list-style-type: none"><li>• Gathering and managing information</li><li>• Selecting and using appropriate tools and technology for a task or project</li><li>• Computer literacy</li><li>• Internet skills</li></ul>	Teach and measure	<ul style="list-style-type: none"><li>• Lectures, exercises, assignments, and projects.</li></ul>

# 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.

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