

Faculty:

Course Outline

Course Name: Web Development Lab 1 (HTTP 5112)

Academic Year: 2021-2022

Faculty Availability:**Associate Dean:**

Heather Lowry

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Schedule Type Code: HYB

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.

| | |
|---------------------------|-----------------------------------|
| School | Faculty of Media & Creative Arts |
| Program | Web Development (11491) |
| Course Name: | Web Development Lab 1 (HTTP 5112) |
| Pre-Requisite(s) | none |
| Co-Requisite(s) | none |
| Equates | none |
| Restrictions | none |
| Credit Value | 6 |
| Total Course Hours | 84 |

Developed By:

Sean Doyle

Prepared By:

Sean Doyle, MA

Approved by

Heather Lowry



Course Description

This course will deliver learning opportunities to practice new skills through hand-on projects based on the content delivered in HTTP 5111 Web Development 1. This lab experience will allow students to simulate the daily activities of a Web Developer through the incorporation of tools and programming languages including current versions of HTML and CSS, JavaScript, SQL and JQuery.

Course Rationale

This course delivers "back-end" strategies and techniques for creating data-driven web applications, including data design, programming in multiple languages, and application deployment.

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. Design, model, implement, optimize and maintain databases to support data-driven solutions for web environments.
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
- Online

Learning Outcomes and Assessments

| Learning Outcome | Lesson Objectives | Summative Assessments | Formative Assessments |
|--|-------------------|--|---|
| Formulate programming statements that will create, read, update or delete data from a data source. | | <ul style="list-style-type: none">• Project: Database Application Project• Project: ASP.NET Web Application Project | <ul style="list-style-type: none">• Written/Online Assessment: Database Quizzes (x 10)• Written/Online Assessment: Database Lab Exercises (x 8)• Written/Online Assessment: ASP.NET Assignments (x 2) |
| Design data source architectures for use in web applications. | | <ul style="list-style-type: none">• Project: Database Application Project• Project: ASP.NET Web Application Project | <ul style="list-style-type: none">• Written/Online Assessment: Database Quizzes (x 10)• Written/Online Assessment: Database Lab Exercises (x 8) |
| Develop and deploy a database-driven website using ASP.NET technology. | | <ul style="list-style-type: none">• Project: ASP.NET Web Application Project | <ul style="list-style-type: none">• Written/Online Assessment: ASP.NET Quizzes (x 3)• Written/Online Assessment: ASP.NET Assignments (x 2) |
| Integrate a database into a web application. | | <ul style="list-style-type: none">• Project: Database Application Project• Project: ASP.NET Web Application Project | <ul style="list-style-type: none">• Written/Online Assessment: Database Quizzes (x 10)• Written/Online Assessment: Database Lab Exercises (x 8)• Written/Online Assessment: ASP.NET Assignments (x 2) |

Assessment Weighting

| Assessment | Weight |
|-----------------------------------|--------|
| <i>Written/Online Assessment:</i> | |

| Assessment | Weight |
|---------------------------------|--------|
| Database Quizzes (x 10) | 10% |
| Database Lab Exercises (x 8) | 24% |
| ASP.NET Quizzes (x 3) | 6% |
| ASP.NET Assignments (x 2) | 20% |
| <i>Projects:</i> | |
| Database Application Project | 16% |
| ASP.NET Web Application Project | 24% |
| Total | 100% |

Modules of Study

| Module | Course Learning Outcomes | Resources | Assessments |
|-------------------------------------|--|-------------------------|--|
| Introduction to Data Storage | <ul style="list-style-type: none"> Design data source architectures for use in web applications. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: Database Quizzes (x 10) Written/Online Assessment: Database Lab Exercises (x 8) |
| Accessing Data from Database Tables | <ul style="list-style-type: none"> Formulate programming statements that will create, read, update or delete data from a data source. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: Database Quizzes (x 10) Written/Online Assessment: Database Lab Exercises (x 8) Project: Database Application Project |
| Intermediate Database Techniques | <ul style="list-style-type: none"> Formulate programming statements that will create, read, update or delete data from a data source. Integrate a database into a web application. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: Database Quizzes (x 10) Written/Online Assessment: Database Lab Exercises (x 8) Project: Database Application Project |
| Database Design | <ul style="list-style-type: none"> Design data source architectures for use in web applications. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: Database Quizzes (x 10) Written/Online Assessment: Database Lab Exercises (x 8) Project: Database Application Project |
| Programming with C# | <ul style="list-style-type: none"> Develop and deploy a database-driven website using ASP.NET technology. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: ASP.NET Quizzes (x 3) Written/Online Assessment: ASP.NET Assignments (x 2) Project: ASP.NET Web Application Project |

| Module | Course Learning Outcomes | Resources | Assessments |
|----------------------------------|---|-------------------------|--|
| Introduction to ASP.NET | <ul style="list-style-type: none"> Develop and deploy a database-driven website using ASP.NET technology. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: ASP.NET Quizzes (x 3) Written/Online Assessment: ASP.NET Assignments (x 2) |
| .NET Controls | <ul style="list-style-type: none"> Develop and deploy a database-driven website using ASP.NET technology. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: ASP.NET Quizzes (x 3) Written/Online Assessment: ASP.NET Assignments (x 2) Project: ASP.NET Web Application Project |
| Data Access for ASP.NET Websites | <ul style="list-style-type: none"> Formulate programming statements that will create, read, update or delete data from a data source. Design data source architectures for use in web applications. Develop and deploy a database-driven website using ASP.NET technology. Integrate a database into a web application. | As provided by faculty. | <ul style="list-style-type: none"> Written/Online Assessment: ASP.NET Quizzes (x 3) Written/Online Assessment: ASP.NET Assignments (x 2) Project: ASP.NET Web Application Project |

Supplemental Resources

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|---|
| <p>Delamater, Mary and Boehm, Anne (2012). <i>Murach’s ASP.NET 4.5 Web Programming with C#</i>. Mike Murach & Associates Inc. ISBN #: 978-1-890774-75-2</p> |
| <p>Murach, Joel (2019). <i>Murach’s MySQL</i>. Mike Murach & Associates. ISBN# 978-1-890774-82-0</p> |
| <p>Walther, Hoffman, and Dudek (2010). <i>ASP.NET 4 Unleashed</i>. Sams Publishing. ISBN #: 978-0-672331121.</p> |

Additional Tools and Equipment

- Web Hosting (instructors will advise)
- Microsoft Visual Studio (Community Edition)

Essential Skills

| Section | Skills | Measurement | Details |
|---------------|---|-----------------------|--|
| Communication | <ul style="list-style-type: none"> Reading Writing Listening Presenting Visual Literacy | Reinforce and measure | <ul style="list-style-type: none"> Lectures and activities. Exercises and assignments |
| Numeracy | <ul style="list-style-type: none"> Understanding and applying mathematical concepts and reasoning Analyzing and using numerical data Conceptualizing | Reinforce and measure | <ul style="list-style-type: none"> Lectures and activities. Exercises and assignments. |

| Section | Skills | Measurement | Details |
|---------------------------------------|--|-------------------|--|
| Critical Thinking and Problem-Solving | <ul style="list-style-type: none"> Analysing Synthesising Decision-Making Creative and Innovative Thinking | Teach and measure | <ul style="list-style-type: none"> Lectures and activities. Exercises and assignments. |
| Information Management | <ul style="list-style-type: none"> Gathering and managing information Selecting and using appropriate tools and technology for a task or project Computer literacy Internet skills | Teach and measure | <ul style="list-style-type: none"> Lectures and activities. Exercises and assignments. |
| Personal Skills | <ul style="list-style-type: none"> Managing self Managing change and being flexible and adaptable Engaging in reflective practice Demonstrating personal responsibility | Teach and measure | <ul style="list-style-type: none"> Lectures and activities. Exercises and assignments. |

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 harassmt 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.

Given the circumstances due to COVID-19, Humber reserves the right to alter the mode of delivery and examinations/assessments in this course.

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