

Faculty:	
Email:	
Faculty Availability:	By email appointment
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COURSE OUTLINE ACADEMIC YEAR 2017/2018

Course Title: Usability and Accessibility			
Course Code: HTTP 5301	Schedule Type Code: LLB	Credit Value: 4	Class Hours: 60
Programs: Web Development Graduate Certificate		Pre-Requisite(s): HTTP 5201, 5206	Co-requisite(s):
Pre-requisite for: HTTP 5305 and graduation			
Restrictions: Full-time students registered in the program.			

Program outcomes emphasized in this course:

1. Explain the types of business transactions conducted on a commercial website and the process for development of such transactions.
2. Prepare and present a proposal and a business plan for a commercial website.
3. Implement a website solution based on a set of business requirements or client specifications.
4. Create a complete content management system using a database and scripting language.
5. Develop data-driven websites for multiple platforms in accordance with best practices, industry standards in content management, security, database design, interface design, usability, accessibility and personalization.
6. Design and develop web services for a website using software programs.
7. Design a full featured functioning commercial website using software programs, including a defined information architecture that is supported by navigation, layout, text and graphics.
8. Manage web development projects using project management practices, documentation and software.
9. Test, troubleshoot and debug software created in the web projects.
10. Develop web projects as a leader or member of a web development team.

Approved by Dean/Associate Dean:

Signature: _____ Date _____

Course Description

This course will expose students to the purposes and techniques of usability testing and accessibility evaluation. With data derived from properly conducted investigations, students will be able to usefully evaluate Web sites, discuss results based on measured data, and identify changes for improvements.

Course Rationale

During the Web development process, developers have to plan for and assess how their creations will be used in two fundamental ways:

Usability — the understanding and evaluation of user goals in interacting with a Web site.
Accessibility — the ability of people who have disabilities to use the same Web site.

Establishing how easy a Web site is to use and how closely aligned it is to users' goals requires developers to develop;

Systematic, rigorous investigations of user interactions with a Web site,

interpretation of observed user actions and feedback within a context informed by knowledge of common parameters.

Testing, evaluating, and revising are all parts of this course.




Learning Outcomes

OQF Category	At the successful completion of the course, the student will have demonstrated an ability to:
Depth and Breadth of Knowledge	1. Describe the importance of usability and accessibility in a Web site
Knowledge of Methodologies	2. Develop and analyze heuristic information 3. Recognize factors that contribute to usability and accessibility
Application of Knowledge	4. Develop a structured and definitive usability assessment document 5. implement WCAG accessibility guidelines
Communication	6. Demonstrate proper evaluation techniques in the assessment of a

Skills	Web site
Awareness of the Limits of Knowledge	<p>7. Develop a rationale for a user-centred development process</p> <p>8. Identify relevant usability criteria and results</p>
Professional Capacity/ Autonomy	

Essential Employability Skills

Essential Employability Skills are transferable skills that provide the foundation for a student's academic, vocational, and personal success.

	<i>Communication</i>		<i>Critical Thinking & Problem Solving</i>		<i>Interpersonal</i>
	<i>Numeracy</i>		<i>Information Management</i>		<i>Personal</i>

Learning Resources

Required Resources:

Readings, including digital resources, will be posted to the course Blackboard site.

Supplemental Resources: Faculty will identify additional references during course of study. If students are to be tested on this material it will be noted in class.

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 (<http://library.humber.ca>) for additional information regarding copyright and for details on allowable limits.

Learning Delivery Format

Lecture (10%); Software instruction (10%); In-class Labs/Tutorials (30%); Supervised In-class Research (20%); Screening of student work/feedback (30%)

Course Content

Module	Topics	Learning outcomes addressed	Learning experiences	Readings/Resources (to be completed before the class or for use in the class)	ASSESSMENTS
1	Broad term definitions for accessibility and usability, basic theory & practice.	1, 2	Heuristic evaluation. Brainstorm task scenarios. Basic static HTML accessibility	In-class lecture & slides Readings	In-class assignment
2	Origins of the open web, disability rights, subjectivity in field practice, usability testing, including analytics, surveys, individual, focus groups, contextual, first click, eye-tracking, and SUS.	8	Accessibility auditing. Breakdown of Steve Krug's test script.	In-class lecture & slides Readings	Reading summaries In-class assignment
3	Personas, task analysis, accessibility linting, semantics, accessible content, history management, & controlling focus	3	WAI-ARIA, scenarios	In-class lecture & slides Readings	Reading summaries In-class assignment
4	Midterm Assignment	1-3	n/a	n/a	n/a
5	Integrating techniques into	1, 2, 4	Using the web with JAWS, using	In-class lecture & slides	Reading summaries

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Module	Topics	Learning outcomes addressed	Learning experiences	Readings/Resources (to be completed before the class or for use in the class)	ASSESSMENTS
	client relationship/team workflow; includes evangelism, automation, auditing, project requirements, securing buy-in, content strategy, information architecture, wireframing & prototyping, and data evaluation.		the mobile web with VoiceOver/TalkBack, reading analytics reports, and managing study participants.	Readings	In-class user experience assessment
6	Native History API, field research etiquette	4, 6	History API best practices for accessibility, being a good 'hall monitor', on-the-fly documentation.	In-class lecture & slides Readings	Reading summaries In-class user experience assessment
7	Writing usability reports, modern JS framework accessibility	2, 5	Accessibility and state management in Vue and React, and creating & presenting usability reports	Reading summaries In-class user experience assessment	Reading summaries In-class user experience assessment
8	Final Projects Due	1-8	Final presentations		Final presentations

Please note: this course schedule may change as resources and circumstances require.

Student Evaluation

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Evaluation	Format	Learning Outcomes Addressed	Due in Week #	%
Reading Summaries	Paper	1-8	Weekly	25
Midterm assignment	Paper	1-3	Week 4	20
Draft of final project	Paper	1-8	Week 6	20
Final/Cumulative Project	Paper and presentation	1-8	Week 8	35
Total				100%

Post Graduate Certificate Students:

In addition to meeting all program specific course and credit requirements, students must have Cumulative Program Grade Point Average (CPGPA) ≥ 60 in order to be eligible for graduation.

The program handbook is available on our learning management system. If you cannot find it please contact the program coordinator. **It is your responsibility to read, understand, and follow the program handbook.**

Policies and Procedures

It is the student's responsibility to be aware of the College Academic Regulations which can be found on the following website: <http://www.humber.ca/academic-regulations>

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.

Academic Concern/Appeals

If a student has questions or concerns regarding a grade on an assignment or test, the student should discuss the matter with the faculty member. The Program Co-ordinator and/or the Associate Dean may be asked to assist if the faculty member and student are unable to resolve issues. For additional information please refer to Section 13 of College's Academic Complaint and Appeal Policy at the web site identified above.

Prior Learning Assessment Recognition (PLAR)

Course credits may be granted in recognition of prior learning, and that Application for Consideration is made through the Office of the Registrar at <https://www.humber.ca/programs/transfer-options/prior-learning-assessment-and-recognition-plar>

Each course outline must indicate method(s) of assessment.

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: <http://www.humber.ca/student-life/swac/accessible-learning>

North Campus: (416) 675-6622 X5090

Lakeshore Campus: (416) 675-6622 X3331

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

<i>Challenge Exam</i>	<i>Portfolio</i>	<i>Skills Test</i>	<i>Interview</i>	<i>Other (Specify)</i>	<i>Not Available For PLAR</i>
x		x			

writing, with approval from the Dean (or designate) of the School.

Appendix

Essential Employability Skills (MTCU Requirements)	Graduates of the program reliably demonstrate the ability to:
Communication	1. communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience
Reading	
Writing	
Speaking	

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Essential Employability Skills (MTCU Requirements)	Graduates of the program reliably demonstrate the ability to:
Listening	2. respond to written, spoken, or visual messages in a manner that ensures effective communication
Presenting	
Numeracy	
Understanding and Applying Mathematical Concepts and Reasoning	3. execute mathematical operations accurately
Analysing and using Numerical Data	
Conceptualizing	
Critical Thinking & Problem Solving	
Analysing	4. apply a systematic approach to solve problems
Synthesising	
Evaluating	5. use a variety of thinking skills to anticipate and solve problems
Decision-Making	
Creative and Innovative Thinking	
Information Management	
Gathering and managing information	6. locate, select, organize and document information using appropriate technology and information systems 7. analyse, evaluate and apply relevant information for a variety of sources
Selecting and using appropriate tools and technology for a task or project	
Computer literacy	
Internet skills	
Interpersonal	
Teamwork	8. show respect for the diverse opinions, values, belief systems and contributions of others
Relationship management	
Conflict resolution	9. interact with others in groups or teams in ways that contribute to the effect working relationships and the achievement of goals
Leadership	
Networking	
Personal	
Managing self	10. manage the use of time and other resources to complete projects 11. take responsibility for one's actions, decisions, and consequences
Managing change and being flexible and adaptable	
Engaging in reflective practice	
Demonstrating personal responsibility	