Course Outline

Students are expected to review and understand all areas of the course outline.

Retain this course outline for future transfer credit applications. A fee may be charged for additional copies.

This course outline is available in alternative formats upon request.

Acknowledgement of Traditional Lands

Centennial is proud to be a part of a rich history of education in this province and in this city. We acknowledge that we are on the treaty lands and territory of the Mississaugas of the Credit First Nation and pay tribute to their legacy and the legacy of all First Peoples of Canada, as we strengthen ties with the communities we serve and build the future through learning and through our graduates. Today the traditional meeting place of Toronto is still home to many Indigenous People from across Turtle Island and we are grateful to have the opportunity to work in the communities that have grown in the treaty lands of the Mississaugas. We acknowledge that we are all treaty people and accept our responsibility to honor all our relations.

Course Description

Web Interface Design is the first course in a sequence of courses (COMP213, COMP125, COMP229) designed to teach students all the important concepts and technologies related to developing current Web applications.

In this first-level web course, the student will learn how to access Internet resources, apply HTML and CSS to publish high-quality Web documents that observe widely accepted design guidelines, and enable web documents to share business data using XML.

External Standard Information (ESI)

N/A

Program Outcomes

Successful completion of this and other courses in the program culminates in the achievement of the Vocational Learning Outcomes (program outcomes) set by the Ministry of Colleges and Universities in the Program Standard. The VLOs express the learning a student must reliably demonstrate before graduation. To ensure a meaningful learning experience and to better understand how this course and program prepare graduates for success, students are encouraged to review the Program Standard by visiting http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/. For apprenticeship-based programs, visit https://www.skilledtradesontario.ca/about-trades/trades-information/.

Course Learning Outcomes

The student will reliably demonstrate the ability to:
1. Apply various software applications to browse the Internet, transfer files, and send email
2. Create HTML documents for the World Wide Web
3. Discuss current Web design concepts
4. Apply CSS to implement the design of a multi-page website
5. Publish and maintain a website
6. Apply XML to create documents that transfer business information over the Internet.
7. Design and implement an AI Chatbot in a web application using HTML5, CSS, and JavaScript, leveraging API's like OpenAI or Gemini.

8.

Essential Employability Skills (EES)

The student will reliably demonstrate the ability to*:

1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.
2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.
5. Use a variety of thinking skills to anticipate and solve problems.
6. Locate, select, organize, and document information using appropriate technology and information systems.
7. Analyze, evaluate, and apply relevant information from a variety of sources.
8. Show respect for diverse opinions, values belief systems, and contributions of others.
10. Manage the use of time and other resources to complete projects.

There are 11 Essential Employability Skills outcomes as per the Ministry Program Standard. Of these 11 outcomes, the following will be assessed in this course.

New Essential Skills (NES)

N/A

Global Citizenship and Equity (GC&E) Outcomes

The student will reliably demonstrate the ability to*:

2. Identify beliefs, values and behaviours that form individual and community identities and the basis for respectful relationships.

There are 6 institutional Global Citizenship & Equity outcomes. Of these 6 outcomes, the following will be assessed in this course.

Methods of Instruction

Lecture,

demonstrations and

hands-on exercises,

class discussions

Text and Other Instructional/Learning Materials

Text Book(s):

Felke-Morris, T. Basics of Web Design HTML5 & CSS, Sixth Edition, Published by Pearson Education, 2022, ISBN-13: 9780137313303

Online Resource(s):

Textbook website:

https://www.pearson.com/en-ca/subject-catalog/p/basics-of-web-design-html5--css/P200000003284/9780137313303

eCentennial Course shell

Classroom and Equipment Requirements

Major Browsers (current version) Visual

Studio Code (current version)

Evaluation Scheme

 ⇨ Assignment 1: Creating a home page on the college web server

 ⇨ Assignment 2: Creating a page with hyperlinks and basic CSS styling

 ⇨ Assignment 3: Creating a page with HTML tables

 ⇨ Written Test 1: multiple choice, short answer, fill-in-the-blank, t/f questions

 ⇨ Assignment 4: Creating and styling an online form

 ⇨ Project: Create a website for a small business

 ⇨ Written Test 2: multiple choice, short answer, fill-in-the-blank, t/f questions

Evaluation Name	CLO(s)	EES Outcome(s)	NES Outcome(s)	GCE Outcome(s)	Weight/ 100
Assignment 1	1, 2, 5	1		2	10
Assignment 2	1, 2, 3	1, 5, 6, 7			10
Assignment 3	1, 2, 3, 4	1, 5, 6, 7			10
Written Test 1	2, 3, 4	1, 2, 5			20
Assignment 4	1, 2, 3	1, 2, 5		2	10
Project	1, 2, 3, 4, 5, 6	1, 2, 5, 6, 7, 8, 10		2	20
Written Test 2	2, 3	1, 2, 5			20
Total					100%

If students are unable to write a test they should immediately contact their professor or program Associate Dean for advice. In exceptional and well documented circumstances (e.g. unforeseen family problems, serious illness, or death of a close family member), students may be able to write a make-up test.

All submitted work may be reviewed for authenticity and originality utilizing College approved plagiarism prevention software. Students who do not wish to have their work submitted to College approved plagiarism prevention software must, by the end of the second week of class, communicate this in writing to the instructor and make mutually agreeable alternate arrangements.

When writing tests, students must be able to produce official Centennial College photo identification or they may be refused the right to take the test or test results will be void.

Tests or assignments conducted remotely may require the use of online proctoring technology where the student's identification is verified and their activity is monitored and/or recorded, both audibly and visually through remote access to the student's computer and web camera. Students must communicate in writing to the instructor as soon as possible and prior to the test or assignment due date if they require an alternate assessment format to explore mutually agreeable alternatives.

Student Accommodation

The Centre for Accessible Learning and Counselling Services (CALCS) (http://centennialcollege.ca/calcs) provides programs and services which empower students in meeting their wellness goals, accommodation and disability-related needs. Our team of professional psychotherapists, social workers, educators, and staff offer brief, solution-focused psychotherapy, accommodation planning, health and wellness education, group counselling, psycho-educational workshops, adaptive technology, and peer support. Walk in for your first intake session at one of our service locations (Ashtonbee Room L1-04, Morningside Room 190, Progress Room C1-03, The Story Arts Centre Room 285, Downsview Room 105) or contact us at calcs@centennialcollege.ca, 416-289-5000 ext. 3850 to learn more about accessing CALCS services.

Use of Dictionaries

- Any dictionary (hard copy or electronic) may be used in regular class work.
- English-Additional Language (e.g. English-Chinese) or Additional Language-English (e.g. Russian-English) dictionaries may be used in regular class work.
- Dictionaries may be used in tests and examinations, or in portions of tests and examinations, as long as they are non-electronic (not capable of storing information) and hard copy (reviewed by the invigilator to ensure notes are not incorporated that would affect test or examination integrity).

Program or School Policies

N/A

Course Policies

N/A

College Policies

Students should familiarize themselves with all College Policies that cover academic matters and student conduct.

All students and employees have the right to study and work in an environment that is free from discrimination and harassment and promotes respect and equity. Centennial policies ensure all incidents of harassment, discrimination, bullying and violence will be addressed and responded to accordingly.

Academic Honesty

Academic honesty is integral to the learning process and a necessary ingredient of academic integrity. Forms of academic dishonesty include cheating, plagiarism, and impersonation, among others. Breaches of academic honesty may result in a failing grade on the assignment or course, suspension, or expulsion from the college. Students are bound to the College's AC100-11 Academic Honesty and Plagiarism policy.

To learn more, please visit the Libraries information page about Academic Integrity

https://libraryguides.centennialcollege.ca/academicintegrity and review Centennial College's Academic Honesty Module:

https://myappform.centennialcollege.ca/ecentennial/articulate/Centennial_College_Academic_Integrity_Module_%202/story.html

Use of Lecture/Course Materials

Materials used in Centennial College courses are subject to Intellectual Property and Copyright protection, and as such cannot be used and posted for public dissemination without prior permission from the original creator or copyright holder (e.g., student/professor/the College/or third-party source). This includes class/lecture recordings, course materials, and third-party copyright-protected materials (such as images, book chapters and articles). Copyright protections are automatic once an original work is created, and applies whether or not a copyright statement appears on the material. Students and employees are bound by College policies, including AC100-22 Intellectual Property, and SL100-02 Student Code of Conduct, and any student or employee found to be using or posting course materials or recordings for public dissemination without permission and/or inappropriately is in breach of these policies and may be sanctioned.

For more information on these and other policies, please visit www.centennialcollege.ca/about-centennial/college-overview/college-policies.

Students enrolled in a joint or collaborative program are subject to the partner institution's academic policies.

PLAR Process

This course is eligible for Prior Learning Assessment and Recognition (PLAR). PLAR is a process by which course credit may be granted for past learning acquired through work or other life experiences. The PLAR process involves completing an assessment (portfolio, test, assignment, etc.) that reliably demonstrates achievement of the course learning outcomes. Contact the academic school to obtain information on the PLAR process and the required assessment.

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Semester:	Fall 2024	Professor(s) Name:	Patrick Gignac
Section Code:	001 and 002	Contact Information:	pgignac@my.centennialcollege.ca
Meeting Time & Location:	See schedule	Office Hours:	By appointment

Topical Outline (subject to change):

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name and Weight	
1	Internet and Web Basics: • The Internet and the Web • Web Standards and Accessibility • Web Browsers and Web Servers • Internet Protocols • URIs and Domain Names • Information on the Web • HTML Overview • Under the Hood of a Web Page	Chapter 1 •Supplemental online material •Lecture slides Course website resources	• Use various software applications to browse the Internet, transfer files, and send email. • Create HTML documents for the World Wide Web.	Lecture, demonstrations and hands-on exercises, class discussions		
2	HTML Basics: • Heading Element Paragraph Element • Line Break and Horizontal Rule • Blockquote Element • Phrase Element • Unordered List • Ordered List • Description List • Special Entity	Chapters 2 •Supplemental online material •Lecture slides Course website resources	• Create HTML documents for the World Wide Web. • Demonstrate knowledge of current design concepts for the Internet documents.	Lecture, demonstrations and hands-on exercises, class discussions	Assignment 1	Week 2

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name and Weight	Evaluation Date
	HTML Syntax Validation Structural Elements					
3	• Hyperlinks • Anchor Element Absolute and Relative Hyperlinks E-mail Hyperlinks Fragment Identifiers • Image Hyperlinks • Design for Your Target Audience Website Organization Principles of Visual Design • Design to Provide for Accessibility Use of Text, Color Web Color Palette Use of Graphics and Multimedia Navigation Design Page Layout Design • Web Design Best Practices	Chapters 3 •Supplemental online material •Lecture slides Course website resources	• Create HTML documents for the World Wide Web. • Demonstrate knowledge of current design concepts for the Internet documents. • Use CSS to implement the design of a multi-page website.	2.Create HTML documents for the World Wide Web. 3.Demonstrate knowledge of current design concepts for the Internet documents. 4.Use CSS to implement the design of a multi-page website.	Assignment 2	Week 3
4	Web Design Basics: • Describe the purpose of Cascading Style Sheets • Configure embedded style sheets • List advantages of using Cascading Style Sheets • Configure web page areas with element name, class, id, and descendant selectors Configure color on web pages with Cascading Style Sheets • Describe the order of precedence in CSS	Chapter 4 •Supplemental online material •Lecture slides Course website resources	• Create HTML documents for the World Wide Web. • Demonstrate knowledge of current design concepts for the Internet documents. • Use CSS to implement the design of a multi-page website.	Lecture, demonstrations and hands-on exercises, class discussions		

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name and Weight	Evaluation Date
	• Configure inline styles • Configure external style sheets • Test your Cascading Style Sheets for valid syntax					
5	HTML Tables oTable Overview oTable Rows, Cells, and Headers oSpan Rows and Columns oConfigure an Accessible Table oStyle a Table with CSS	Chapter 9 •Supplemental online material •Lecture slides Course website resources	2. Create HTML documents for the World Wide Web. 3. Demonstrate knowledge of current design concepts for the Internet documents. 4. Use CSS to implement the design of a multi-page website.	Lecture, demonstrations and hands-on exercises, class discussions	Assignment 3	Week 5
6	Graphics and Text Styling Basics: oWeb Graphics oImage Element oOptimize a Photo for the Web oConfigure Background Images oCSS3 Background Image Properties oCSS3 Opacity and Gradients oThe Favorites Icon oConfigure List Markers with CSS CSS Text Properties	Chapter 5 •Supplemental online material •Lecture slides Course website resources	2. Create HTML documents for the World Wide Web. 3. Demonstrate knowledge of current design concepts for the Internet documents. 4. Use CSS to implement the design of a multi-page website.	Lecture, demonstrations and hands-on exercises, class discussions		
7	Review	N/A	N/A	Class discussions	Written Test 1	Week 7
8	More CSS and Page Layout Basics: oThe Box Model oMargin and Padding with CSS oBorders with CSS oCSS Rounded Corners oCenter Page Content with CSS oCSS Box Shadow and Text Shadow o Background Clip, Resize and Scale o CSS Opacity o CSS Gradients	Chapters 6 •Supplemental online material •Lecture slides Course website resources	2. Create HTML documents for the World Wide Web. 3. Demonstrate knowledge of current design concepts for the Internet documents. 4. Use CSS to implement the design of a multi-page website.	Lecture, demonstrations and hands-on exercises, class discussions		

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name and Weight	Evaluation Date
9	HTML Forms oForm Overview Form Fields Style a From with CSS HTML5 Form fields	Chapter 10 •Supplemental online material •Lecture slides Course website resources	• Create HTML documents for the World Wide Web. • Demonstrate knowledge of current design concepts for the Internet documents.	Lecture, demonstrations and hands-on exercises, class discussions	Assignment 4	Week 10
10	Page Responsive Layout Basics: • Normal Flow Positioning with CSS • Float • CSS Two-Column Page Layout • CSS for Print • CSS for the Mobile Web • CSS Flexible Box Layout • Practice with Flexbox • CSS Grid Layout • Media Queries	Chapter 7, 8 •Supplemental online material • Course website resources	• Create HTML documents for the World Wide Web. • Demonstrate knowledge of current design concepts for the Internet documents. • Use CSS to implement the design of a multi-page website. • Final Project requirements overview	Lecture, demonstrations and hands-on exercises, class discussions		
11	Media and Interactivity Basics: • Web Multimedia • Configure Audio and Video Element • Iframe Elemen • CSS Transform and Transition Properties • OpenAI Chatbot	Chapter 11 •Supplemental online material •Lecture Course website resources slides https://www.tialwizards.in/2023/07/create-chatbot-for-websites.html#google_vignette	• Create HTML documents for the World Wide Web. • Demonstrate knowledge of current design concepts for the Internet documents. • Use CSS to implement the design of a multi-page website. • Design a user-friendly interface for AI Chatbot using HTML and Css • Implement JavaScript code to handle Chatbot interactions and manage API calls	Lecture, demonstrations and hands-on exercises, class discussions		
12	Web Publishing and Maintenance: • Register a Domain Name • Choose a Web Host	Chapter 12 •Supplemental online material	• Publish and maintain a website	Lecture, demonstrations and hands-on exercises, class discussions		

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name and Weight	Evaluation Date
	• Publish with File Transfer Protocol Search Engine SubmissionSearch Engine Optimization • Accessibility Testing • Usability Testing	Lecture slides Course website resources				
13	Introduction to XML: • Compare HTML and • XML • Describe the structure of an XML document • Create custom elements and attributes • Link an XML documents to a style sheet • Display an XML document in the browser • Review	•Supplemental online material • Lecture slides Course website resources	• Use XML to create documents that transfer business information over the Internet.	Lecture, demonstrations and hands-on exercises, class discussions	Project	Week 13
14	Final Test	•Supplemental online material • Lecture slides Course website resources	Review and Final test		Written Test 2	