DURHAM COLLEGE
SUCCESS MATTERS

Faculty of Sci, Eng, & IT

Web Development - Fundamentals

2023-24 Academic Year

Program Title	Ministry Title	Major	Year	Semester
SEIT-Computer Foundations	--	CFND	1	2
SEIT-Computer Programming	--	CPPG	1	2
SEIT-Computer Programming and Analysis	--	CPGA	1	2
SEIT-Computer Programming and Analysis (Co-op Internship)	--	CPGI	1	2
SEIT-Computer Programming and Analysis (Co-op)	--	CPGC	1	2
SEIT-Computer Systems Technician	--	CSTC	1	2
SEIT-Computer Systems Technician - ONTechU Transfer	--	CSTU	1	2
SEIT-Computer Systems Technology	--	CSTY	1	2
SEIT-Computer Systems Technology (Co-op)	--	CSCC	1	2

Course Code:	INFT 1206	**Course Equiv. Code(s):**	WEBD 2201
Course Hours:	56	**Course GPA Weighting:**	4
Prerequisite:	N/A		
Corequisite:	N/A		
Laptop Course:	**Yes** [X] **No** [ ]		
Delivery Mode(s):	**In class** [X] **Online** [ ] **Hybrid** [ ] **Flexible** [ ] **HyFlex** [ ]		
Remote proctoring required	**Yes** [ ] **No** [X]		
Authorized by (Dean or Director):	Tony Doyle	**Date:**	September 2023

Prepared by		
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Course Description:

In this course, students will explore the basics of web design and development for the modern Web. Students will participate in instructor-led discussions based on assigned readings of industry-standard resources and subsequently work on several online tutorials during class time to gain exposure to and practical experience creating professional-level web pages. Students will publish their working websites on a public-facing web server. Additionally, students will be able to discuss the importance of and strategies for making their websites "web accessible".

Campus Closure Notice

In the event of a campus closure during which time classes cannot be conducted or attended in person, course delivery will be conducted remotely where possible. Should teaching and learning resume on campus, students may be organized into smaller groups for classroom delivery, in accordance with directions from public health authorities. In either situation, the learning plan sequence and/or evaluation methods may be adjusted to address topics requiring hands-on, practical learning activities.

Subject Eligibility for Prior Learning Assessment & Recognition (PLAR):

Prior Learning Assessment and Recognition (PLAR) is a process a student can use to gain college credit(s) for learning and skills acquired through previous life and work experiences. Candidates who successfully meet the course learning outcomes of a specific course may be granted credit based on the successful assessment of their prior learning. The type of assessment method (s) used will be determined by subject matter experts. Grades received for the PLAR challenge will be included in the calculation of a student's grade point average.

The PLAR application process is outlined in http://www.durhamcollege.ca/plar. Full-time and part-time students must adhere to all deadline dates. Please email: PLAR@durhamcollege.ca for details.

PLAR Eligibility

Yes [X] **No** [ ]

PLAR Assessment (if eligible):

- [ ] Assignment
- [ ] Exam
- [ ] Portfolio
- [ ] Other

To receive a credit for this course challenging individual to show ability to create HTML pages incorporating CSS and JavaScript. In addition, the instructor would want to evaluate the challenger's knowledge of accessibility as it pertains to pages on the Web. Details would be arranged between candidate and professor.

Course Learning Outcomes

Course Learning Outcomes contribute to the achievement of Program Learning Outcomes for courses that lead to a credential (e.g. diploma). A complete list of Vocational/Program Learning Outcomes and Essential Employability Skill Outcomes are located in each Program Guide.

Course Specific Learning Outcomes (CLO)

Student receiving a credit for this course will have reliably demonstrated their ability to:

CLO1	Distinguish the various components of the contemporary WorldWideWeb and how they interact.
CLO2	Demonstrate the skills required to create well-designed, static webpages implementing HTML and CSS.
CLO3	Describe client-side scripting (JavaScript) and how it is implemented to add complex features on web pages.
CLO4	Implement JavaScript/DOM to provide dynamic functionality on web pages.
CLO5	Explain the purpose of web forms, how they are designed and processed.
CLO6	Understand the concept, importance and basic strategies for creating "web accessible" pages.

Essential Employability Skill Outcomes (ESSO)

This course will contribute to the achievement of the following Essential Employability Skills:

- [ ] EES 1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.
- [X] EES 2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.
- [ ] EES 3. Execute mathematical operations accurately.
- [ ] EES 4. Apply a systematic approach to solve problems.
- [ ] EES 5. Use a variety of thinking skills to anticipate and solve problems.
- [ ] EES 6. Locate, select, organize, and document information using appropriate technology and information systems.
- [ ] EES 7. Analyze, evaluate, and apply relevant information from a variety of sources.
- [ ] EES 8. Show respect for the diverse opinions, values, belief systems, and contribution of others.
- [ ] EES 9. Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.
- [X] EES 10. Manage the use of time and other resources to complete projects.
- [ ] EES 11. Take responsibility for one's own actions, decisions, and consequences.

Evaluation Criteria:

The Course Learning Outcomes and Essential Employability Skills Outcomes are evaluated by the following evaluation criterion.

Evaluation Description	Course Learning Outcomes	EESOs	Weighting
Assignment: 1 - HTML Overview	CLO2	EES2, EES7, EES10	10
Assignment: 2 - HTML Multimedia and Tables	CLO2	EES2, EES7, EES10	10
Assignment: 3 - CSS	CLO2	EES2, EES7, EES10	15
Assignment: 4 - JavaScript	CLO4	EES2, EES7, EES10	20
Assignment: 5 - Web Accessibility	CLO6	EES2, EES7, EES10	5
Test: Term Test 1 - HTML and CSS	CLO1	EES2	15
Test: Term Test 2 - JavaScript	CLO3, CLO5	EES2	20
Quiz: Quiz 1 - Web Accessibility	CLO6	EES2	5
Total			**100%**

Notes:

1. The interim mark will be calculated based on results of the first three (3) labs.
2. Term tests will be closed book, in-class with M/C, T/F, FIB and S/A questions based on assigned readings and the completion the practical assignments.
3. The use of any electronic messaging software or device is not permitted during invigilated evaluation.
4. Plagiarism and cheating are serious breaches of the College's Academic Integrity policy. That policy, defined in ACAD-101 (http://www.durhamcollege.ca/wp-content/uploads/ACAD-101-Academic-Integrity.pdf) will be applied to all students involved in incidents of plagiarism and/or cheating. The penalties could include any of the following (depending on severity of the issue): a mark of zero on an evaluation, a mark of zero in the course, non-admittance to a course or program, withdrawal from a course, or dismissal from the college. In all cases, a formal Academic Alert will be issued that will document the infraction that has taken place, notification will be given to the Dean/Associate Dean and a record will be placed in the student's file.
5. If it is determined that a student has willingly shared any portion or all of an assignment and/or test, or copied from another student, ALL STUDENTS INVOLVED shall be deemed as having cheated, and the penalties described above will apply. This includes sending files to other students for review of concepts/work, viewing/copying someone else's work (with or without their knowledge/permissions) and submitting their work as your own.
6. All tests must be completed during the scheduled test time in the assigned classroom. In the event a student is absent for a term test, the student will contact the instructor as soon as possible to inform them of the absence and the reason the student could not show up. Make-up tests will not be provided, unless there is a valid/strong reason for missing the test.
7. Assignment requirements shall be posted in DC Connect, the requirements will include project specifications, due dates and specific submission details. Students are encouraged to read lab requirements closely, as there are marks for attention to detail. Students are advised that the key to success in this course, in addition to regular attendance, is the timely completion of the labs.
8. Students are expected to complete labs in a timely manner (i.e. on-time) and produce web pages with a professional appearance and content (i.e. no inappropriate content). Completion of labs requires publishing of

web pages onto GitHub. Files submitted as email attachments or in DC Connect drop boxes to the instructor will be discarded.

9. Assignments are due by the due date assigned in class and posted on DC Connect. Each professor will provide a facility for the submission of late assignments up to a maximum of 72 hours after the assignment due date. All late submissions will be assessed a penalty of 25% of the total possible grade for the assignment, regardless of the number of hours late up to but not beyond 72 hours. Assignments should be submitted on time, on a regular basis, to enable you to stay on track within the class. THERE ARE NO EXCEPTIONS TO THE PENALTY.
10. All assignments will be marked and returned within 10 days after the due date of each assignment as posted on DC Connect. If this is not possible, the professor will provide notification in writing on DC Connect.
11. Students are encouraged to complete and submit all assignments throughout the semester as they are the best way to demonstrate and receive feedback on concepts that have been presented during lectures.
12. Students' code completed for assessments in this course is expected to adhere to a style guide. The style guide chosen for this course can be found on DC Connect. Adherence to the style guide will contribute to grading for assessments in this course.
13. Midnight on the last school day of the last week of the semester is the final deadline for submission of any lab or assignment. No lab or assignment will be accepted after that date and time. THIS RULE SUPERSEDES THE 72 HOUR RULE.

Required Text(s) and Supplies:

1. All students must have a Durham College approved laptop computer.

   Students will be referred to online resources/websites (no textbook required).

Recommended Resources (purchase is optional):

N/A

Policies and Expectations for the Learning Environment:

General Policies and Expectations:

General College policies related to	**General policies related to**
+ Acceptable Use of Information Technology + Academic Policies + Academic Integrity + Standards for Student Conduct for all Learning Environments can be found at https://durhamcollege.ca/wp-content/uploads/Standards-of-Student-Conduct-for-all-Learning-Environments.pdf + Information about academic policies and procedures can be found on-line at https://durhamcollege.ca/about/governance/policies	+ attendance + absence related to tests or assignment due dates + excused absences + writing tests and assignments + classroom management can be found in the Program Guide (full time programs only) in MyDC https://durhamcollege.ca/mydc/

All students at Durham College have the responsibility to familiarize themselves with and abide by the college's Academic Integrity Policy. Students are expected to complete and submit their own work in an honest manner, in accordance with the policy. Durham College has zero tolerance for breaches of academic integrity. All suspected breaches of academic integrity will be investigated and documented following procedures outlined in the policy, and should a breach be confirmed, appropriate penalties will be levied. Breaches of academic integrity refer to a variety of practices including, but not limited to:

• copying another person's work;
• using unauthorized materials or resources during an evaluation;
• obtaining unauthorized copies of evaluations in advance;
• collaborating without permission;
• colluding or providing unauthorized assistance;
• falsifying academic documents or records;
• misrepresenting academic credentials;
• buying, selling, stealing, soliciting, exchanging or transacting materials or information for the purpose of academic gain;
• bribing or attempting to bribe personnel;
• impersonation;
• submitting the same work in more than one course without authorization;
• improper use of computer technology and the internet;
• depriving others of academic resources;
• misrepresenting reasons for special consideration of academic work;
• plagiarizing or failing to acknowledge ideas, data, graphics or other content without proper and full acknowledgement;
• any unauthorized use of generative or other artificial intelligence.

If you have questions or concerns about what constitutes appropriate academic conduct or research and citation methods, and what your responsibilities are towards academic integrity, please visit the Academic Integrity website on MyDC, reach out to Student Academic Learning Services (SALS), or speak with your professor or Student Advisor.

Course Specific Policies and Expectations:

Attendance: The Web Development concepts will be assigned as readings before they will be discussed as a group in class. Though there are no attendance marks per se in this course, consistent attendance has been proven to be a strong indicator of student success in any course. Therefore attendance to both discussions and labs is strongly encouraged.

Students are responsible for material missed during absences.

Academic dishonsety: Students may work together, but each student must eventually produce their own assignment for submission, no copying is allowed. GitHub keeps an accurate record of changes and when they are committed. No students should have identical Git repositories based on this.

At all times, students are expected to respect that other students have right to a distraction-free learning environment. Failure to comply with this conduct, the student will be asked to leave the class immediately without any warning.

General Course Outline Notes:

1. Students should use the course outline as a learning tool to guide their achievement of the learning outcomes for this course. Specific questions should be directed to their individual professor.
2. The college considers the electronic communication methods (i.e. DC Mail or DC Connect) as the primary channel of communication. Students should check the sources regularly for current course information.
3. Professors are responsible for following this outline and facilitating the learning as detailed in this outline.
4. Course outlines should be retained for future needs (i.e. university credits, transfer of credits etc.)
5. A full description of the Academic Appeals Process can be found at https://durhamcollege.ca/about/governance/policies/academic-policies .
6. Faculty are committed to ensuring accessible learning for all students. Students who would like assistance with academic access and accommodations in accordance with the Ontario Human Rights Code should register with the Access and Support Centre (ASC). ASC is located in room SW116, Oshawa Campus and in room 180 at the Whitby Campus. Contact ASC at 905-721-3123 for more information.
7. Durham College is committed to the fundamental values of preserving academic integrity. Durham College and faculty members reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments could be subject to submission either by themselves or by the faculty member for a review of textual similarity to Turnitin.com. Further information about Turnitin can be found on the Turnitin.com Web site.

Learning Plan

The Learning Plan is a planning guideline. Actual delivery of content may vary with circumstances.

Students will be notified in writing of changes that involve the addition or deletion of learning outcomes or evaluations, prior to changes being implemented, as specified in the Course Outline Policy and Procedure at Durham College.

Week/ Module	**Hours:** 4 **Delivery:** In Class
1	**Course Learning Outcomes** CLO1, CLO2
	Essential Employability Skills **Taught:** EES2 **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Course Introduction HTML Comments * Discuss comments and their importance in the IT field * Demonstrate <!-- HTML Comments --> and how they are to be used to submit assignments HTML5 Page Validation * Discuss page validation in general * Demonstrate validating a page to the HTML5 standard Web Publishing * Discuss web publishing as a concept: * Explore Using an online tool like GitHub or Google App Engine * Setup and test GitHub as a web server Web Development Overview * Students pre-read: "Getting started with the web" pages in "Complete beginners start here!" - Getting started with the web - Installing basic software - What will your website look like? - Dealing with files - HTML basics - CSS basics - JavaScript basics - Publishing your website - How the web works * Discuss "Complete beginners start here!" in MDN Web Docs HTML Introduction * Students pre-read: "Introduction to HTML" pages in "HTML - Structuring the web" - Introduction to HTML - Getting started with HTML - What's in the head? Metadata in HTML - HTML text fundamentals - Creating hyperlinks - Advanced text formatting - Document and website structure - Debugging HTML * Discuss "Introduction to HTML" in MDN Web Docs Work on Lab 1: HTML Overview * Create web page(s) to satisfy Lab 1 requirements
	Intended Learning Activities * discussion of course outline * demonstration/discussion/Q&A/implementation * independent learning

Resources and References

Course Outline in DC Connect

https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web

HTML Comments module in DC Connect

HTML5 Page Validation module in DC Connect

GitHub Module in DC Connect

https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/Publishing_your_website#using_an_online_tool_like_github_or_google_app_engine

https://github.com/

https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML

https://developer.mozilla.org/en-US/docs/Learn/HTML

Requirements and rubric found in DC Connect

https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Marking_up_a_letter

https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Structuring_a_page_of_content

Evaluation

Assignment: 1 - HTML Overview
Assignment: 2 - HTML Multimedia and Tables
Assignment: 3 - CSS
Assignment: 4 - JavaScript
Assignment: 5 - Web Accessibility
Test: Term Test 1 - HTML and CSS

Week/ Module	Hours: 4 Delivery: In Class
2	**Course Learning Outcomes** CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Complete Assignment 1: HTML Overview * Create web page(s) to satisfy Assignment 1 requirements
	Intended Learning Activities * discussion/Q & A/implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Marking_up_a_letter https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML/Structuring_a_page_of_content
	Evaluation **Weighting** Assignment: 1 - HTML Overview 10

Week/ Module	**Hours:** 4 **Delivery:** In Class
3	**Course Learning Outcomes** CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics HTML Multimedia * Students pre-read: "Multimedia and embedding" pages in "HTML - Structuring the web" - Multimedia and embedding - Images in HTML - Video and audio content - From object to iframe - other embedding technologies - Adding vector graphics to the web - Responsive images * Discuss "Multimedia and embedding" in MDN Web Docs HTML Tables * Students pre-read: "HTML tables" pages in "HTML - Structuring the web" - HTML tables - HTML table basics - HTML table advanced features and accessibility * Discuss "HTML tables" in MDN Web Docs Work on Assignment 2: HTML Multimedia and Tables * Create web page(s) to satisfy Assignment 2 requirements
	Intended Learning Activities * independent learning * discussion * Q&A * implementation
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/HTML/Multimedia_and_embedding Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/HTML/Multimedia_and_embedding/Mozilla_splash_page https://developer.mozilla.org/en-US/docs/Learn/HTML/Tables https://developer.mozilla.org/en-US/docs/Learn/HTML/Multimedia_and_embedding/Mozilla_splash_page
	Evaluation Assignment: 2 - HTML Multimedia and Tables Test: Term Test 1 - HTML and CSS

Week/ Module	**Hours:** 4 **Delivery:** In Class
4	**Course Learning Outcomes** CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics HTML Tables * Students pre-read: "HTML tables" pages in "HTML - Structuring the web" - HTML tables - HTML table basics - HTML table advanced features and accessibility * Discuss "HTML tables" in MDN Web Docs Complete Assignment 2: HTML Multimedia and Tables * Create web page(s) to satisfy Assignment 2 requirements
	Intended Learning Activities * independent learning * discussion * Q & A * implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/HTML/Multimedia_and_embedding/Mozilla_splash_page https://developer.mozilla.org/en-US/docs/Learn/HTML/Tables/Structuring_planet_data
	Evaluation **Weighting** Assignment: 2 - HTML Multimedia and Tables 10

Week/ Module	**Hours:** 4 **Delivery:** In Class
5	**Course Learning Outcomes** CLO1, CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics CSS - (Cascading Style Sheets) * Students pre-read: "CSS first steps" pages in "CSS - Styling the web" - CSS first steps overview - What is CSS? - Getting started with CSS - How CSS is structured - How CSS works * Discuss "CSS first steps" in MDN Web Docs CSS - (Cascading Style Sheets) * Students pre-read: "CSS building blocks" pages in "CSS - Styling the web" - CSS building blocks - CSS selectors - Type, class, and ID selectors - Attribute selectors - Pseudo-classes and pseudo-elements - Combinators - Cascade, specificity, and inheritance - Cascade layers - The box model - Backgrounds and borders - Handling different text directions - Overflowing content - CSS values and units - Sizing items in CSS - Images, media, and form elements - Styling tables - Debugging CSS - Organizing your CSS - Fundamental CSS comprehension - Creating fancy letterheaded paper * Discuss "CSS building blocks" in MDN Web Docs Work on Assignment 3: CSS * Create web page(s) to satisfy Assignment 3 requirements
	Intended Learning Activities * independent learning * discussion * Q&A * implementation
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps/Styling_a_biography_page

	Evaluation Assignment: 3 - CSS Test: Term Test 1 - HTML and CSS
Week/ Module	**Hours:** 2 **Delivery:** In Class
6	**Course Learning Outcomes** CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics CSS - (Cascading Style Sheets) * Students pre-read: "Styling text" pages in "CSS - Styling the web" - CSS styling text - Fundamental text and font styling - Styling lists - Styling links - Web fonts * Discuss "Styling text" in MDN Web Docs Work on Assignment 3: CSS * Create web page(s) to satisfy Assignment 3 requirements
	Intended Learning Activities * independent learning * discussion * Q&A * implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/A_cool_looking_box
	Evaluation Assignment: 3 - CSS Test: Term Test 1 - HTML and CSS

Week/ Module	**Hours:** 2 **Delivery:** In Class
6	**Course Learning Outcomes** CLO1
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics CSS - (Cascading Style Sheets) * Students pre-read: "CSS Layout" pages in "CSS - Styling the web" - Introduction to CSS layout - Normal Flow - Flexbox - Grids - Floats - Positioning - Multiple-column layout - Responsive design - Beginner's guide to media queries - Legacy layout methods - Supporting older browsers * Discuss "CSS Layout" in MDN Web Docs Work on Assignment 3: CSS * Create web page(s) to satisfy Assignment 3 requirements
	Intended Learning Activities * independent learning * discussion * Q&A * implementation
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/CSS/Styling_text Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout
	Evaluation Assignment: 3 - CSS Test: Term Test 1 - HTML and CSS

Week/ Module	Hours: 4 Delivery: In Class
7	**Course Learning Outcomes** CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Complete Assignment 3: CSS * Create web page(s) to satisfy Assignment 3 requirements
	Intended Learning Activities * Q & A * implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps/Styling_a_biography_page https://developer.mozilla.org/en-US/docs/Learn/CSS/Building_blocks/A_cool_looking_box https://developer.mozilla.org/en-US/docs/Learn/CSS/Styling_text/Typesetting_a_homepage https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Fundamental_Layout_Comprehension
	Evaluation **Weighting** Assignment: 3 - CSS 15

Week/ Module	**Hours:** 2 **Delivery:** In Class
8	**Course Learning Outcomes** CLO1
	Essential Employability Skills
	Taught: **Practiced:** EES2
	Intended Learning Objectives/Topics Term Test 1 - HTML and CSS Consists of: * closed-book, in-class Quiz Module dealing with topics covered in discussions in class and from assignment requirements (format is T/F, FIB, M/C in DC Connect)
	Intended Learning Activities * assess knowledge
	Resources and References All assigned readings in: * Complete beginners start here! * HTML - Structuring the web * CSS - Styling the web All concepts implemented in practical assignments 1 (HTML Overview), 2 (HTML Multimedia and Tables) and 3 (CSS)
	Evaluation **Weighting** Test: Term Test 1 - HTML and CSS 15

Week/ Module	**Hours:** 2 **Delivery:** In Class
8	**Course Learning Outcomes** CLO2, CLO3, CLO4
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics JavaScript * Students pre-read: "JavaScript first steps" pages in "JavaScript - Dynamic client-side scripting" - What is JavaScript? - A first splash into JavaScript - What went wrong? Troubleshooting JavaScript - Storing the information you need - Variables - Basic math in JavaScript - numbers and operators - Handling text - strings in JavaScript - Useful string methods - Arrays * Discuss "JavaScript First Steps" in MDN Web Docs Work on Assignment 4: JavaScript * Create web page(s) to satisfy Assignment 4 requirements
	Intended Learning Activities * independent learning * discussion * Q&A * implementation
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Silly_story_generator
	Evaluation Assignment: 4 - JavaScript Test: Term Test 2 - JavaScript

Week/ Module	**Hours:** 4 **Delivery:** In Class
9	**Course Learning Outcomes** CLO3
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics JavaScript * Students pre-read: "JavaScript building blocks" pages in "JavaScript - Dynamic client-side scripting" - Making decisions in your code - conditionals - Looping code - Functions - reusable blocks of code - Build your own function - Function return values - Introduction to events * Discuss "JavaScript building blocks" in MDN Web Docs Work on Assignment 4: CSS * Create web page(s) to satisfy Assignment 4 requirements
	Intended Learning Activities * independent learning * discussion * Q&A * implementation
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building_blocks Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Silly_story_generator https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building_blocks/Image_gallery
	Evaluation Assignment: 4 - JavaScript Test: Term Test 2 - JavaScript

Week/ Module	Hours: 2	Delivery: In Class
9	**Course Learning Outcomes** CLO2, CLO4	
	Essential Employability Skills	
	Taught:	**Practiced:** EES2, EES10
	Intended Learning Objectives/Topics	
	Intended Learning Activities * discussion * Q & A * implementation	
	Resources and References N/A	
	Evaluation Assignment: 4 - JavaScript	
Week/ Module	**Hours:** 2	**Delivery:** In Class
10	**Course Learning Outcomes** CLO3	
	Essential Employability Skills	
	Taught:	**Practiced:** EES2
	Intended Learning Objectives/Topics JavaScript * Students pre-read: "Introducing JavaScript objects" pages in "JavaScript - Dynamic client-side scripting" - JavaScript object basics - Object prototypes - Object-oriented programming - Classes in JavaScript - Working with JSON * Discuss "Introducing JavaScript objects" in MDN Web Docs	
	Intended Learning Activities * independent learning * discussion * Q&A	
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Objects	
	Evaluation Assignment: 4 - JavaScript Test: Term Test 2 - JavaScript	

Week/ Module	**Hours:** 2 **Delivery:** In Class
10	**Course Learning Outcomes** CLO2
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Work on Assignment 4: JavaScript * Create web page(s) to satisfy Assignment 4 requirements
	Intended Learning Activities * Q & A * implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Silly_story_generator https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building_blocks/Image_gallery https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Objects/Object_building_practice https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Objects/Adding_bouncing_balls_features
	Evaluation Assignment: 4 - JavaScript

Week/ Module	**Hours:** 4 **Delivery:** In Class
11	**Course Learning Outcomes** CLO2, CLO4
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Complete Assignment 4: JavaScript * Create web page(s) to satisfy Assignment 4 requirements
	Intended Learning Activities * Q & A * implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Silly_story_generator https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Building_blocks/Image_gallery https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Objects/Object_building_practice https://developer.mozilla.org/en-US/docs/Learn/JavaScript/Objects/Adding_bouncing_balls_features
	Evaluation **Weighting** Assignment: 4 - JavaScript 20

Week/ Module	**Hours:** 2 **Delivery:** In Class
12	**Course Learning Outcomes** CLO5
	Essential Employability Skills
	Taught: **Practiced:** EES2
	Intended Learning Objectives/Topics JavaScript Forms * Students pre-read: "Core forms learning pathway" pages in "Web forms - Working with user data" - Your first form - How to structure a web form - Basic native form controls - The HTML5 input types - Other form controls - Styling web forms - Advanced form styling - UI pseudo-classes - Client-side form validation - Sending form data * Discuss "Core forms learning pathway" in MDN Web Docs
	Intended Learning Activities * independent learning * discussion * Q&A
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/Forms
	Evaluation Test: Term Test 2 - JavaScript

Week/ Module	**Hours:** 2 **Delivery:** In Class
12	**Course Learning Outcomes** CLO6
	Essential Employability Skills
	Taught: **Practiced:** EES2
	Intended Learning Objectives/Topics Web Accessibility * Students pre-read: "Accessibility guides" pages in "Accessibility - Make the web usable by everyone" - Accessibility - What is accessibility? - HTML: A good basis for accessibility - CSS and JavaScript accessibility best practices - WAI-ARIA basics - Accessible multimedia - Mobile accessibility * Discuss "Accessibility Guides" in MDN Web Docs
	Intended Learning Activities * independent learning * discussion * Q&A
	Resources and References https://developer.mozilla.org/en-US/docs/Learn/Accessibility
	Evaluation Assignment: 5 - Web Accessibility Quiz: Quiz 1 - Web Accessibility

Week/ Module	Hours: 2	Delivery: In Class
13	**Course Learning Outcomes** CLO6	
	Essential Employability Skills	
	Taught:	**Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Work on Assignment 5: Web Accessibility * Create web page(s) to satisfy Assignment 5 requirements	
	Intended Learning Activities * Q & A/implementation	
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/Accessibility/Accessibility_troubleshooting	
	Evaluation Assignment: 5 - Web Accessibility	

Week/ Module	Hours: 2	Delivery: In Class
13	**Course Learning Outcomes** CLO3, CLO4, CLO5	
	Essential Employability Skills	
	Taught:	**Practiced:** EES2
	Intended Learning Objectives/Topics Term Test 2 - JavaScript Consists of: * closed-book, in-class Quiz Module dealing with topics covered in discussions in class and from assignment requirements (format is T/F, FIB, M/C in DC Connect)	
	Intended Learning Activities * assess knowledge	
	Resources and References All assigned readings in: * JavaScript - Dynamic client-side scripting * Web forms - Working with user data All concepts implemented in practical assignments 4 (JavaScript)	
	Evaluation Test: Term Test 2 - JavaScript	**Weighting** 20

Week/ Module	Hours: 2 Delivery: In Class
14	**Course Learning Outcomes** CLO6
	Essential Employability Skills
	Taught: **Practiced:** EES2, EES10
	Intended Learning Objectives/Topics Complete Assignment 5: Web Accessibility * Create web page(s) to satisfy Assignment 5 requirements
	Intended Learning Activities * Q & A * implementation
	Resources and References Requirements and rubric found in DC Connect https://developer.mozilla.org/en-US/docs/Learn/Accessibility/Accessibility_troubleshooting
	Evaluation **Weighting** Assignment: 5 - Web Accessibility 5

Week/ Module	Hours: 2 Delivery: In Class
14	**Course Learning Outcomes** CLO6
	Essential Employability Skills
	Taught: **Practiced:** EES2
	Intended Learning Objectives/Topics Quiz 1 - Web Accessibility Consists of: * closed-book, in-class Quiz Module dealing with topics covered in discussions in class and from assignment requirements (format is T/F, FIB, M/C in DC Connect)
	Intended Learning Activities * assess knowledge
	Resources and References Readings and discussion of "Accessibility guides" pages in "Accessibility - Make the web usable by everyone": https://developer.mozilla.org/en-US/docs/Learn/Accessibility Concepts implemented in Assignment 5 - Web Accessibility
	Evaluation **Weighting** Quiz: Quiz 1 - Web Accessibility 5

This course supports the following program(s) and program learning outcomes.

CSCC: Computer Systems Technology (Coop)	#1. Identify, analyze, design, develop, implement, verify and document the requirements for a computing environment.
	#3. Analyze, design, implement and maintain secure computing environments.
	#4. Analyze, develop and maintain robust computing system solutions through validation testing and industry best practices.
	#13. Install, monitor, optimize and administer a database management system in response to specified requirements.
	#14. Design, implement, and administer technical support processes for computing system infrastructures that aligns with industry best practice.
CSTC: Computer Systems Technician	#1. Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
	#3. Implement and maintain secure computing environments.
	#4. Implement robust computing system solutions through validation testing that aligns with industry best practices.
	#12. Install and monitor a database management system in response to specified requirements.
	#13. Provide technical support for computing system infrastructures that aligns with industry best practice.
CSTU: Computer Systems Technician - OnTechU Transfer	#1. Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
	#3. Implement and maintain secure computing environments.
	#4. Implement robust computing system solutions through validation testing that aligns with industry best practices.
	#12. Install and monitor a database management system in response to specified requirements.
	#13. Provide technical support for computing system infrastructures that aligns with industry best practice.
CSTY: Computer Systems Technology	#1. Identify, analyze, design, develop, implement, verify and document the requirements for a computing environment.
	#3. Analyze, design, implement and maintain secure computing environments.
	#4. Analyze, develop and maintain robust computing system solutions through validation testing and industry best practices.
	#13. Install, monitor, optimize and administer a database management system in response to specified requirements.
	#14. Design, implement, and administer technical support processes for computing system infrastructures that aligns with industry best practice.