

# COURSE OUTLINE: CSD0120 - INTRO TO WEB DEVELOP

Prepared: Bazlur Rasheed

Approved: Martha Irwin, Chair, Community Services and Interdisciplinary Studies

Course Code: Title	CSD0120: INTRODUCTION TO WEB DEVELOPMENT		
Program Number: Name	1120: COMMUNITY INTEGRATN		
Department:	C.I.C.E.		
Semesters/Terms:	18F		
Course Description:	A student in this course will learn the basics of the World Wide Web and creating Web Pages. The fundamentals of Web Page creation will be covered including how to: create anchors, attach relative and absolute hyperlinks, linking to other types of documents (such as Word, Excel, Powerpoint, PDF), work with fonts, colours, and graphics as well as a variety of tools to enhance web pages. The web development will be enhanced by the use of: tables, newspaper style layouts, Cascading Style Sheets, dynamic HTML, and forms. If time permits, we will explore JavaScripting and using other enhancing features such as sound, video, Java Applets, and animated features.		
Total Credits:	5		
Hours/Week:	4		
Total Hours:	60		
Prerequisites:	There are no pre-requisites for this course.		
Corequisites:	There are no co-requisites for this course.		
This course is a pre-requisite for:	CSD0212		
Essential Employability Skills (EES) addressed in this course:	<ul> <li>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.</li> <li>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</li> <li>EES 4 Apply a systematic approach to solve problems.</li> <li>EES 5 Use a variety of thinking skills to anticipate and solve problems.</li> <li>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</li> <li>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</li> <li>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</li> <li>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</li> <li>EES 10 Manage the use of time and other resources to complete projects.</li> </ul>		
	EES 11 Take responsibility for ones own actions, decisions, and consequences.		
Course Evaluation:			
Course Evaluation: Other Course Evaluation &	EES 11 Take responsibility for ones own actions, decisions, and consequences.		

SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

CSD0120: INTRODUCTION TO WEB DEVELOPMENT

**Assessment Requirements:** and Evaluation portion of the class AND the Laboratory portion.

Grade

Definition Grade Point Equivalent

A+ 90 - 100% 4.00

A 80 - 89%

B 70 - 79% 3.00

C 60 - 69% 2.00

D 50 - 59% 1.00

F (Fail) 49% and below 0.00

CR (Credit) Credit for diploma requirements has been awarded.

S Satisfactory achievement in field /clinical placement or non-graded subject area.

U Unsatisfactory achievement in field/clinical placement or non-graded subject area.

X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.

NR Grade not reported to Registrar's office.

W Student has withdrawn from the course without academic penalty.

#### **Books and Required** Resources:

Basics of Web Design: HTML5 & CSS3, 4th Edition, 2018 by Terry Felke-Morris

Publisher: Pearson Education, Inc. Edition: 4th

ISBN: 9780134444338

The student may choose to purchase this hardcopy of the text or an electronic copy of the text

(eText).

Basics of Web Design: HTML5 & CSS3 -- Instant Access, 4th Edition, 2018 by Terry

Felke-Morris

Publisher: Pearson Education, Inc. Edition: 4th

ISBN: 9780134489216

The student may choose to purchase this electronic copy of the text (eText) or a hardcopy of

the text.

# Course Outcomes and Learning Objectives:

Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will acquire varying levels of skill development relevant to the following learning outcomes:

Course Outcome 1	Learning Objectives for Course Outcome 1	
Internet and Web Basics	<ul> <li>ââ`¬Â¢ describe the evolution of the Internet and the Web</li> <li>ââ`¬Â¢ explain the need for web standards</li> <li>ââ`¬Â¢ describe universal design</li> <li>ââ`¬Â¢ identify benefits of accessible web design</li> <li>ââ`¬Â¢ identify reliable resources of information on the Web</li> <li>ââ`¬Â¢ identify ethical uses of the Web</li> <li>ââ`¬Â¢ describe the purpose of web browsers and web servers</li> <li>ââ`¬Â¢ identify Internet protocols</li> <li>ââ`¬Â¢ define URIs and domain names</li> <li>ââ`¬Â¢ describe HTML, XHTML, and HTML5</li> <li>ââ`¬Â¢ create your first web page</li> <li>Ā¢â`¬Â¢ use the body, head, title, and meta elements</li> <li>Ā¢â`¬Â¢ name, save, and test a web page</li> </ul>	
Course Outcome 2	Learning Objectives for Course Outcome 2	
HTML Basics	ââ`¬Â¢ configure the body of a web page with headings, paragraphs, divs, lists, and blockquotes	

🙈 SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

	$\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure special entity characters, line breaks, and horizontal rules $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure text with phrase elements $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ test a web page for valid syntax $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure a web page using new HTML5 header, nav, and footer elements $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ use the anchor element to link from page to page $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure absolute, relative, and e-mail hyperlinks	
Course Outcome 3	Learning Objectives for Course Outcome 3	
Web Design Basics	$\tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ describe the most common types of web-site organization \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ describe principles of visual design \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ design for your target audience \\ \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ design for your target audience \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ design for your target audience \\ \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ describe the readability of the text on your web pages \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ describe appropriately on web pages \\ \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ describe web page layout design to web pages \\ \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ describe the concept of responsive web design \\ \tilde{A} \not e \hat{a}  \neg \hat{A} \not e \ apply best practices of web design$	
Course Outcome 4	Learning Objectives for Course Outcome 4	
Cascading Style Sheets Basics	$\tilde{A}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ describe the purpose of Cascading Style Sheets $\tilde{A}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ list advantages of using Cascading Style Sheets $\tilde{A}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ configure color on web pages with Cascading Style Sheets $\tilde{A}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ configure inline styles $\tilde{A}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ configure embedded style sheets $\tilde{a}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ configure external style sheets $\tilde{a}$ ¢ $\hat{a}$ $\tilde{a}$ ¢ configure web page areas with element name, class, id, and descendant selectors $\tilde{a}$ ¢ $\hat{a}$ $\tilde{a}$ ¢¢	
Course Outcome 5	Learning Objectives for Course Outcome 5	
Graphics & Text Styling Basics	$\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ describe types of graphics used on the Web $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ apply the image element to add graphics to web pages $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure images as backgrounds on web pages $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure images as hyperlinks $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure image maps $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure bullets in unordered lists with images $\tilde{A}\phi\hat{a}$ ` $\neg\hat{A}\phi$ configure multiple background images with CSS3	
Course Outcome 6	Learning Objectives for Course Outcome 6	
More CSS Basics	ââ`¬Â¢ configure text typeface, size, weight, and style with CSS ââ`¬Â¢ align and indent text with CSS ââ`¬Â¢ describe and apply the CSS box model ââ`¬Â¢ configure width and height with CSS ââ`¬Â¢ configure margin, border, and padding with CSS ââ`¬Â¢ center web page content with CSS ââ`¬Â¢ apply shadows with CSS3 ââ`¬Â¢ apply cSS3 properties to background images	

	$\tilde{A} \phi \hat{a} \hat{\ } \hat{\ } \hat{A} \phi$ configure opacity, RGBA color, HSLA color, and gradients with CSS3		
Course Outcome 7	Learning Objectives for Course Outcome 7		
Page Layout Basics	$\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ configure float with CSS $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ configure fixed positioning with CSS $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ configure relative positioning with CSS $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ configure absolute positioning with CSS $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ create two-column page layouts with CSS $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ configure navigation in unordered lists and style with CSS $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ and interactivity to hyperlinks with CSS pseudo-classes $\tilde{A}\phi\hat{a}$ $\tilde{A}\phi$ configure CSS sprites		
Course Outcome 8	Learning Objectives for Course Outcome 8		
More on Links, Layout, and Mobile	$\tilde{A} \not c \hat{a} \hat{a} \not c \hat{b}$ code relative hyperlinks to web pages in folders within a website $\tilde{A} \not c \hat{a} \hat{a} \not c \hat{b}$ configure a hyperlink to a named fragment internal to a web page $\tilde{A} \not c \hat{b} \hat{b} = 0$ configure images with captions using the HTML5 figure and figcaption elements $\tilde{A} \not c \hat{b} = 0$ configure a collection of images to float across a web page $\tilde{A} \not c \hat{b} = 0$ configure web pages with new HTML5 section, hyroup, article, and time elements $\tilde{A} \not c \hat{b} = 0$ apply techniques to ensure backward compatibility with older browsers $\tilde{A} \not c \hat{b} = 0$ configure web pages for printing with CSS $\tilde{A} \not c \hat{b} = 0$ configure web pages for mobile display using the viewport meta tag $\tilde{A} \not c \hat{b} = 0$ apply responsive web design techniques with CSS3 media queries and flexible images		
Course Outcome 9	Learning Objectives for Course Outcome 9		
Table Basics	$\tilde{\mathbb{A}} \not \in \hat{\mathbb{A}} \   \neg \hat{\mathbb{A}} \not \in \text{ describe the recommended use of a table on a web page} \\ \tilde{\mathbb{A}} \not \in \hat{\mathbb{A}} \   \neg \hat{\mathbb{A}} \not \in \text{ configure a basic table with the table, table row, table header, and table cell elements} \\ \tilde{\mathbb{A}} \not \in \hat{\mathbb{A}} \   \neg \hat{\mathbb{A}} \not \in \text{ configure table sections with the thead, tbody, and tfoot elements} \\ \tilde{\mathbb{A}} \not \in \hat{\mathbb{A}} \   \neg \hat{\mathbb{A}} \not \in \text{ increase the accessibility of a table} \\ \tilde{\mathbb{A}} \not \in \hat{\mathbb{A}} \   \neg \hat{\mathbb{A}} \not \in \text{ style an HTML table with CSS} \\ \tilde{\mathbb{A}} \not \in \hat{\mathbb{A}} \   \neg \hat{\mathbb{A}} \not \in \text{ describe the purpose of CSS structural pseudo-classes} $		
Course Outcome 10	Learning Objectives for Course Outcome 10		
Form Basics	$\tilde{\mathbb{A}}\phi\hat{\mathbb{A}}$ ` $\hat{\mathbb{A}}\phi$ describe common uses of forms on web pages $\tilde{\mathbb{A}}\phi\hat{\mathbb{A}}$ ` $\hat{\mathbb{A}}\phi$ create forms on web pages using the form, input, textarea, and select elements $\tilde{\mathbb{A}}\phi\hat{\mathbb{A}}$ ` $\hat{\mathbb{A}}\phi$ associate form controls and groups using label, fieldset, and legend elements $\tilde{\mathbb{A}}\phi\hat{\mathbb{A}}$ ` $\hat{\mathbb{A}}\phi$ use CSS to style a form $\tilde{\mathbb{A}}\phi\hat{\mathbb{A}}$ ` $\hat{\mathbb{A}}\phi$ describe the features and common uses of		

	server-side processing $\tilde{A}\phi\hat{a}\tilde{a}\tilde{a}\phi\hat{a}\tilde{a}\tilde{a}\phi$ invoke server-side processing to handle form data $\tilde{A}\phi\hat{a}\tilde{a}\tilde{a}\phi\hat{a}\tilde{a}\phi$ configure new HTML5 form controls including the e-mail, URL, datalist, range, spinner, calendar, and color-well controls	
Course Outcome 11	Learning Objectives for Course Outcome 11	
Media and Interactivity Basics	ââ`¬Â¢ describe types of multimedia files used on the Web ââ`¬Â¢ configure hyperlinks to multimedia files ââ`¬Â¢ configure audio and video on a web page with HTML5 elements ââ`¬Â¢ configure a Flash animation on a web page ââ`¬Â¢ use the CSS3 transform property ââ`¬Â¢ use the CSS3 transition property ââ`¬Â¢ describe the purpose of the HTML5 canvas element	
Course Outcome 12	Learning Objectives for Course Outcome 12	
Web Publishing Basics	<ul> <li>ââ`¬Â¢ describe criteria to consider when youââ`¬â ¢re selecting a web host</li> <li>ââ`¬Â¢ obtain a domain name for your website</li> <li>ââ`¬Â¢ publish a website using FTP</li> <li>ââ`¬Â¢ design web pages that are friendly to search engines</li> <li>ââ`¬Â¢ submit a website for inclusion in a search engine</li> <li>ââ`¬Â¢ determine whether a website meets accessibility requirements</li> <li>ââ`¬Â¢ evaluate the usability of a website</li> </ul>	

# **Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight	Course Outcome Assessed
Assignments and Attendance	10%	
Labs and Final Web Project	40%	
Quizzes	10%	
Theory and Lab Tests	40%	

#### CICE Modifications:

#### **Preparation and Participation**

- 1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and guizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.
- A. Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

### B. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified



SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

so the answer will reflect a basic understanding.

- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

### C. Tests will be written in CICE office with assistance from a Learning Specialist.

#### The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

## D. Assignments may be modified in the following ways:

- 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
- 2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

## The Learning Specialist may:

- 1. Use a question/answer format instead of essay/research format
- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group
- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

#### E. Evaluation:

Is reflective of modified learning outcomes.

NOTE: Due to the possibility of documented medical issues, CICE students may require alternate methods of evaluation to be able to acquire and demonstrate the modified learning outcomes

# Date:

August 27, 2018

Please refer to the course outline addendum on the Learning Management System for further information.

CSD0120: INTRODUCTION TO WEB DEVELOPMENT