



COURSE OUTLINE: CSD120 - INTRODUCTION TO WEB

Prepared: Rodney Martin

Approved: Corey Meunier, Chair, Technology and Skilled Trades

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| Course Code: Title | CSD120: INTRODUCTION TO WEB DEVELOPMENT |
| Program Number: Name | 2090: COMPUTER PROGRAMMER 2091: COMPUTER - PROG/ANAL |
| Department: | COMPUTER STUDIES |
| Semesters/Terms: | 19F |
| Course Description: | A student in this course will learn the fundamentals of creating web sites using modern HTML and CSS. After a brief introduction to the World Wide Web, they will learn the HTML elements that are used in all web pages, including page layout elements, tables, forms, and more modern media elements for video and audio. Students will also learn advanced styling techniques using CSS3 to give web sites custom layouts and appearances, including responsive design and CSS animation. Throughout the course, particular attention will be paid to Web accessibility in web sites according to WCAG 2.0. |
| 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: | CSD212 |
| Vocational Learning Outcomes (VLO's) addressed in this course: Please refer to program web page for a complete listing of program outcomes where applicable. | 2090 - COMPUTER PROGRAMMER VLO 5 Gather and document required information and assist in an analysis of a business. VLO 7 Maintain effective working relationships with clients. VLO 8 Conform to workplace expectations found in information technology (IT) environments. |
| Essential Employability Skills (EES) addressed in this course: | 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. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. 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 contributions of others. EES 9 Interact with others in groups or teams that contribute to effective working |



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| | relationships and the achievement of goals. | | | | |
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| | EES 10 Manage the use of time and other resources to complete projects. | | | | |
| | EES 11 Take responsibility for ones own actions, decisions, and consequences. | | | | |
| Course Evaluation: | Passing Grade: 50%, D | | | | |
| Other Course Evaluation & Assessment Requirements: | <p>To successfully pass this course, the student must receive passing grades for both the Test and Evaluation portion of the class AND the Laboratory portion.</p> <p>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</p> <p>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.</p> | | | | |
| Books and Required Resources: | <p>Basics of Web Design: HTML5 & CSS3, 4th Edition, 2018 by Terry Felke-Morris Publisher: Pearson Education, Inc. Edition: 4th ISBN: 9780134444338, 0134444337 The student may choose to purchase this hardcopy of the text or an electronic copy of the text (eText).</p> <p>Basics of Web Design: HTML5 & CSS3 -- Instant Access, 4th Edition, 2018 by Terry Felke-Morris Publisher: Pearson Education, Inc. Edition: 4th ISBN: eText ISBN: 9780134444413, 0134444418 Buy online: https://www.vitalsource.com/products/basics-of-web-design-terry-felke-morris-v9780134444413</p> | | | | |
| Course Outcomes and Learning Objectives: | <table border="1"> <thead> <tr> <th>Course Outcome 1</th><th>Learning Objectives for Course Outcome 1</th></tr> </thead> <tbody> <tr> <td>Internet and Web Basics</td><td> 1.1 describe the evolution of the Internet and the Web 1.2 explain the need for web standards 1.3 describe universal design 1.4 identify benefits of accessible web design 1.5 identify reliable resources of information on the Web 1.6 identify ethical uses of the Web 1.7 describe the purpose of web browsers and web servers 1.8 identify Internet protocols 1.9 define URIs and domain names 1.10 describe HTML, XHTML, and HTML5 1.11 create your first web page 1.12 use the body, head, title, and meta elements 1.13 name, save, and test a web page </td></tr> </tbody> </table> | Course Outcome 1 | Learning Objectives for Course Outcome 1 | Internet and Web Basics | 1.1 describe the evolution of the Internet and the Web 1.2 explain the need for web standards 1.3 describe universal design 1.4 identify benefits of accessible web design 1.5 identify reliable resources of information on the Web 1.6 identify ethical uses of the Web 1.7 describe the purpose of web browsers and web servers 1.8 identify Internet protocols 1.9 define URIs and domain names 1.10 describe HTML, XHTML, and HTML5 1.11 create your first web page 1.12 use the body, head, title, and meta elements 1.13 name, save, and test a web page |
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| | Course Outcome 2 | Learning Objectives for Course Outcome 2 |
| | HTML Basics | 2.1 configure the body of a web page with headings, paragraphs, divs, lists, and blockquotes 2.2 configure special entity characters, line breaks, and horizontal rules 2.3 configure text with phrase elements 2.4 test a web page for valid syntax 2.5 configure a web page using new HTML5 header, nav, and footer elements 2.6 use the anchor element to link from page to page 2.7 configure absolute, relative, and e-mail hyperlinks |
| | Course Outcome 3 | Learning Objectives for Course Outcome 3 |
| | Web Design Basics | 3.1 describe the most common types of web-site organization 3.2 describe principles of visual design 3.3 design for your target audience 3.4 create clear, easy-to-use navigation 3.5 improve the readability of the text on your web pages 3.6 use graphics appropriately on web pages 3.7 apply the concept of universal design to web pages 3.8 describe web page layout design techniques 3.9 describe the concept of responsive web design 3.10 apply best practices of web design |
| | Course Outcome 4 | Learning Objectives for Course Outcome 4 |
| | Cascading Style Sheets Basics | 4.1 describe the purpose of Cascading Style Sheets 4.2 list advantages of using Cascading Style Sheets 4.3 configure color on web pages with Cascading Style Sheets 4.4 configure inline styles 4.5 configure embedded style sheets 4.6 configure external style sheets 4.7 configure web page areas with element name, class, id, and descendant selectors |
| | Course Outcome 5 | Learning Objectives for Course Outcome 5 |
| | Graphics & Text Styling Basics | 5.1 describe types of graphics used on the Web 5.2 apply the image element to add graphics to web pages 5.3 configure images as backgrounds on web pages 5.4 configure images as hyperlinks 5.5 configure image maps 5.6 configure bullets in unordered lists with images 5.7 configure multiple background images with CSS3 |
| | Course Outcome 6 | Learning Objectives for Course Outcome 6 |
| | More CSS Basics | 6.1 configure text typeface, size, weight, and style with CSS 6.2 align and indent text with CSS 6.3 describe and apply the CSS box model 6.4 configure width and height with CSS 6.5 configure margin, border, and padding with CSS 6.6 center web page content with CSS 6.7 apply shadows with CSS3 6.8 configure rounded corners with CSS3 6.9 apply CSS3 properties to background images 6.10 configure opacity, RGBA color, HSLA color, and gradients |

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| | with CSS3 |
| Course Outcome 7 | Learning Objectives for Course Outcome 7 |
| Page Layout Basics | 7.1 configure float with CSS 7.2 configure fixed positioning with CSS 7.3 configure relative positioning with CSS 7.4 configure absolute positioning with CSS 7.5 create two-column page layouts with CSS 7.6 configure navigation in unordered lists and style with CSS 7.7 add interactivity to hyperlinks with CSS pseudo-classes 7.8 configure CSS sprites |
| Course Outcome 8 | Learning Objectives for Course Outcome 8 |
| More on Links, Layout, and Mobile | 8.1 code relative hyperlinks to web pages in folders within a website 8.2 configure a hyperlink to a named fragment internal to a web page 8.3 configure images with captions using the HTML5 figure and figcaption elements 8.4 configure a collection of images to float across a web page 8.5 configure web pages with new HTML5 section, hgroup, article, and time elements 8.6 apply techniques to ensure backward compatibility with older browsers 8.7 configure web pages for printing with CSS 8.8 describe mobile web design best practices 8.9 configure web pages for mobile display using the viewport meta tag 8.10 apply responsive web design techniques with CSS3 media queries and flexible images |
| Course Outcome 9 | Learning Objectives for Course Outcome 9 |
| Table Basics | 9.1 describe the recommended use of a table on a web page 9.2 configure a basic table with the table, table row, table header, and table cell elements 9.3 configure table sections with the thead, tbody, and tfoot elements 9.4 increase the accessibility of a table 9.5 style an HTML table with CSS 9.6 describe the purpose of CSS structural pseudo-classes |
| Course Outcome 10 | Learning Objectives for Course Outcome 10 |
| Form Basics | 10.1 describe common uses of forms on web pages 10.2 create forms on web pages using the form, input, textarea, and select elements 10.3 associate form controls and groups using label, fieldset, and legend elements 10.4 use CSS to style a form 10.5 describe the features and common uses of server-side processing 10.6 invoke server-side processing to handle form data 10.7 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 | 11.1 describe types of multimedia files used on the Web 11.2 configure hyperlinks to multimedia files 11.3 configure audio and video on a web page with HTML5 elements 11.4 configure a Flash animation on a web page 11.5 use the CSS3 transform property 11.6 use the CSS3 transition property 11.7 describe the purpose of the HTML5 canvas element | | | | | | | | |
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| | Course Outcome 12 | Learning Objectives for Course Outcome 12 | | | | | | | | |
| | Web Publishing Basics | 12.1 describe criteria to consider when you` ``````re selecting a web host 12.2 obtain a domain name for your website 12.3 publish a website using FTP 12.4 design web pages that are friendly to search engines 12.5 submit a website for inclusion in a search engine 12.6 determine whether a website meets accessibility requirements 12.6 evaluate the usability of a website | | | | | | | | |
| Evaluation Process and Grading System: | <table><tr><th>Evaluation Type</th><th>Evaluation Weight</th></tr><tr><td>Assignments and Attendance</td><td>10%</td></tr><tr><td>Labs and Final Web Project</td><td>40%</td></tr><tr><td>Theory and Lab Tests</td><td>50%</td></tr></table> | | Evaluation Type | Evaluation Weight | Assignments and Attendance | 10% | Labs and Final Web Project | 40% | Theory and Lab Tests | 50% |
| Evaluation Type | Evaluation Weight | | | | | | | | | |
| Assignments and Attendance | 10% | | | | | | | | | |
| Labs and Final Web Project | 40% | | | | | | | | | |
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| Date: | August 27, 2019 | | | | | | | | | |
| Addendum: | Please refer to the course outline addendum on the Learning Management System for further information. | | | | | | | | | |

