COURSE OUTLINE: CSD120 - INTRODUCTION TO WEB

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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:	20F
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, accessibility standards to make web sites usable to the widest possible audience will be highlighted. Students will use modern web browsers, GitHub, and Visual Studio Code to create working web sites.
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 8 Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems. VLO 10 Cntribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks. VLO 11 Apply one or more programming paradigms such as, object-oriented, structured or functional programming, and design principles, as well as documented requirements, to the software development process.
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.

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	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 relationships and the achievement of goals. 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 A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	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. 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:	Learn Web Development Publisher: Mozilla Developer Network https://developer.mozilla.org/en-US/docs/Learn
Course Outcomes and Learning Objectives:	

Course Outcome 1	Learning Objectives for Course Outcome 1
Understand foundational web technology and use it to publish a basic web site	1.1 set up a development environment for building websites (text editor, version control) 1.2 design web page content, themes, and layouts 1.3 organize website files for easy understanding and maintainability 1.4 understand file paths 1.5 recognize HTML, CSS, & JavaScript and describe their

	purposes in a website 1.6 create a very simple web page and publish it to a web server 1.7 explain how a web page gets from a server to a user`s browser window
Course Outcome 2	**Learning Objectives for Course Outcome 2**
Understand HTML syntax and structure, and create basic HTML documents	2.1 understand HTML syntax, and write custom HTML 2.2 create valid HTML documents with the help of validation tools 2.3 markup web page content and layout using appropriate semantic elements 2.4 add meta data, stylesheets, and scripts to an HTML document 2.5 create SEO-friendly and accessible hyperlinks in an HTML document 2.6 understand the components of URLs 2.7 use in-browser developer tools to inspect and debug HTML
Course Outcome 3	**Learning Objectives for Course Outcome 3**
Add multimedia to web pages in a responsive and accessible way	3.1 add responsive, accessible images, figures, video, and audio to a web page 3.2 understand and adhere to copyright and licensing rules when using outsourced multimedia 3.3 manage the presentation of web page multimedia using appropriate element attributes 3.4 understand multimedia file formats 3.5 enable transcripts for video/audio on a web page 3.6 embed external content into a web page using iframes 3.7 explain the security concerns involved in using iframes 3.8 add vector graphics to a web page
Course Outcome 4	**Learning Objectives for Course Outcome 4**
Add tables and forms to HTML documents	4.1 add accessible tables to HTML documents and structure them using HTML 4.2 understand when NOT to use tables 4.3 add web forms to HTML documents using appropriate form input and structural elements 4.4 understand form-server interaction and inspect using browser developer tools 4.5 understand security risks involved with using forms 4.6 understand the limitations in styling for HTML forms
Course Outcome 5	**Learning Objectives for Course Outcome 5**
Understand CSS syntax and concepts, and apply basic styling to HTML documents	5.1 understand CSS syntax and write valid, well-formatted CSS with the help of validation tools 5.2 link stylesheets to a web page 5.3 understand and use the various CSS selectors and combinators 5.4 understand and use CSS classes, pseudo-classes, and pseudo-elements in HTML and stylesheets 5.5 use web tools and documentation to determine browser

	support for CSS features 5.6 understand cascade, specificity and inheritance as they pertain to CSS rules 5.7 use in-browser developer tools to inspect and debug web page styling 5.8 understand the CSS box model and manipulate it using appropriate declarations 5.9 use CSS to apply backgrounds and borders to HTML elements 5.10 use CSS units to specify absolute or relative dimensions 5.11 specify colors using CSS 5.12 understand how HTML elements are sized, and manipulate size using appropriate declarations 5.13 use CSS to style multimedia, forms, and tables 5.15 describe CSS methodologies such as BEM, OOCSS, and SASS
Course Outcome 6	**Learning Objectives for Course Outcome 6**
Use CSS to style website text	6.1 specify text styling using CSS 6.2 use CSS to format HTML lists 6.3 use CSS to format HTML hyperlinks 6.4 obtain web fonts for use in a website 6.5 use CSS writing modes and logical properties to enable non-right-to-left text
Course Outcome 7	**Learning Objectives for Course Outcome 7**
Use CSS advanced techniques to manipulate the layout of web pages consistently on the widest possible range of browsers and devices	7.1 understand the normal flow of layout in HTML documents 7.2 use the flexbox and grid modules to arrange HTML elements in rows, columns, or grids 7.3 change the flow of text around specific elements using the float and related properties 7.4 use the position property to precisely control the position of HTML elements 7.5 use the responsive design approach to style web pages appropriately on any size of device 7.6 use media queries to specify when certain CSS rules apply 7.7 explain why the viewport meta tag is necessary in responsive design 7.8 support older browsers using appropriate fallbacks, feature queries, vendor-prefixes

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Labs	40%
Quizzes	10%
Tests	50%

Date: July 22, 2020

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

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