



## COURSE OUTLINE: CSD112 - INTRO. TO WEB DEV.

Prepared: Rodney Martin

Approved: Martha Irwin, Dean, Business and Information Technology

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| <b>Course Code: Title</b>                                                                            | CSD112: INTRODUCTION TO WEB DEVELOPMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Program Number: Name</b>                                                                          | 2095: COMPUTER PROGRAMMING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Department:</b>                                                                                   | COMPUTER STUDIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Academic Year:</b>                                                                                | 2024-2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Course Description:</b>                                                                           | <p>HTML, CSS, and JavaScript are the fundamental technologies of the web. After an introduction to the World Wide Web, students learn the HTML elements that are used in all web pages, including page layout elements, tables, forms, and media elements for video and audio. Students then learn how to apply custom layouts and appearances using CSS and responsive design techniques. JavaScript is introduced to add dynamic behaviour to a web site. Throughout the course, accessibility standards to make web sites usable to the widest possible audience are highlighted.</p> <p>Students use modern web browsers, GitHub, and Visual Studio Code to create working web sites.</p> |
| <b>Total Credits:</b>                                                                                | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Hours/Week:</b>                                                                                   | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Total Hours:</b>                                                                                  | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Prerequisites:</b>                                                                                | There are no pre-requisites for this course.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Corequisites:</b>                                                                                 | There are no co-requisites for this course.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>This course is a pre-requisite for:</b>                                                           | CSD213                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>                                | <b>2095 - COMPUTER PROGRAMMING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Please refer to program web page for a complete listing of program outcomes where applicable.</b> | VLO 8 Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                      | VLO 10 Contribute 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Essential Employability Skills (EES) addressed in this course:</b>                                | 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.

**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:**

Students are expected to be present to write all tests in class, unless otherwise specified. If a student is unable to write a test due to illness or a legitimate emergency, that student must contact the professor prior to class and provide reasoning. Should the student fail to contact the professor, the student shall receive a grade of zero on the test.

If a student is not present 10 minutes after the test begins, the student will be considered absent and will not be given the privilege of writing the test.

Students exhibiting academic dishonesty during a test will receive an automatic zero. Please refer to the College Academic Dishonesty Policy for further information.

In order to qualify to write a missed test, the student shall have:

- a.) attended at least 75% of the classes to-date.
- b.) provide the professor an acceptable explanation for his/her absence.
- c.) be granted permission by the professor.

NOTE: The missed test that has met the above criteria will be an end-of-semester test.

Labs / assignments are due on the due date indicated by the professor. Notice by the professor will be written on the labs / assignments and verbally announced in advance, during class.

Labs and assignments that are deemed late will have a 10% reduction per academic day to a maximum of 5 academic days at 50% (excluding weekends and holidays). Example: 1 day late - 10% reduction, 2 days late, 20%, up to 50%. After 5 academic days, no late assignments and labs will be accepted. If you are going to miss a lab / assignment deadline due to circumstances beyond your control and seek an extension of time beyond the due date, you must contact your professor in advance of the deadline with a legitimate reason that is acceptable.

It is the responsibility of the student who has missed a class to contact the professor immediately to obtain the lab / assignment. Students are responsible for doing their own work. Labs / assignments that are handed in and are deemed identical or near identical in content may constitute academic dishonesty and result in a zero grade.

Students are expected to be present to write in-classroom quizzes. There are no make-up options for missed in-class quizzes.

Students have the right to learn in an environment that is distraction-free, therefore, everyone is expected to arrive on-time in class. Should lectures become distracted due to students walking in late, the professor may deny entry until the 1st break period, which can be up to 50 minutes after class starts or until that component of the lecture is complete.

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 by MDN

Publisher: MDN

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

**Course Outcomes and Learning Objectives:**

| <b>Course Outcome 1</b>                                                              | <b>Learning Objectives for Course Outcome 1</b>                                                                                                                                                                                                                                                                                                                                                                                                          |
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| 1. Describe 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)<br>1.2 Design web page content, themes, and layouts<br>1.3 Organize website files for easy understanding and maintainability<br>1.4 Recognize HTML, CSS, & JavaScript and describe their purposes in a website<br>1.5 Create a very simple web page and publish it to a web server<br>1.6 Explain how a web page gets from a server to a user's browser window |
| <b>Course Outcome 2</b>                                                              | <b>Learning Objectives for Course Outcome 2</b>                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2. Describe HTML syntax and structure, and create basic HTML documents               | 2.1 Describe HTML syntax, and write custom HTML<br>2.2 Create valid HTML documents with the help of validation tools<br>2.3 Markup web page content and layout using appropriate semantic elements<br>2.4 Add meta data, stylesheets, and scripts to an HTML document<br>2.5 Create SEO-friendly and accessible hyperlinks in an HTML document<br>2.6 Describe the components of URLs<br>2.7 Use in-browser developer tools to inspect and debug HTML    |
| <b>Course Outcome 3</b>                                                              | <b>Learning Objectives for Course Outcome 3</b>                                                                                                                                                                                                                                                                                                                                                                                                          |
| 3. Add multimedia, tables, and forms to web pages in a responsive and accessible way | 3.1 Add responsive, accessible images, figures, video, and audio to a web page<br>3.2 Adhere to copyright and licensing rules when using outsourced multimedia                                                                                                                                                                                                                                                                                           |



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|                                                                                | <p>3.3 Embed external content into a web page using iframes</p> <p>3.4 Explain the security concerns involved in using iframes</p> <p>3.5 Add vector graphics to a web page</p> <p>3.6 Add and structure accessible tables</p> <p>3.7 Add web forms using appropriate input and structural elements</p> <p>3.8 Explain the nature of form submission and related security concerns</p>                                                                                                                                                                                                                                                                                                                                       |
| <b>Course Outcome 4</b>                                                        | <b>Learning Objectives for Course Outcome 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 4. Describe CSS syntax and concepts, and apply basic styling to HTML documents | <p>4.1 Describe CSS syntax and write valid, well-formatted CSS with the help of validation tools</p> <p>4.2 Describe and use CSS selectors, combinators, classes, pseudo-classes, and pseudo-elements</p> <p>4.3 Determine browser support for CSS features using web tools and documentation</p> <p>4.4 Explain cascade, specificity and inheritance as they pertain to CSS rules</p> <p>4.5 Inspect and debug web page styling using in-browser developer tools</p> <p>4.6 Describe the CSS box model and manipulate it using appropriate declarations</p> <p>4.7 Create layouts using flexbox and grid</p> <p>4.8 Use responsive design techniques to adapt style and layout appropriately on a wide range of devices</p> |
| <b>Course Outcome 5</b>                                                        | <b>Learning Objectives for Course Outcome 5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5. Introduction to JavaScript                                                  | <p>5.1 Include JavaScript code in HTML documents</p> <p>5.2 Write basic code structures such as variable declarations, conditions, loops, and functions</p> <p>5.3 Implement simple dynamic behaviour using event attributes on HTML elements</p> <p>5.4 Configure JavaScript libraries to add dynamic behaviour to a web page</p> <p>5.5 Use browser tools to debug JavaScript code</p>                                                                                                                                                                                                                                                                                                                                     |

**Evaluation Process and Grading System:**

| <b>Evaluation Type</b> | <b>Evaluation Weight</b> |
|------------------------|--------------------------|
| Lab Assignments        | 40%                      |
| Quizzes                | 10%                      |
| Test 1                 | 25%                      |
| Test 2                 | 25%                      |

**Date:**

July 2, 2024

**Addendum:**

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

