

Course Code: CIS 152

Course Title: Web Design and Development I

Department: Business/Computer Science and Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 11.0801

Repeatability: 0

Credit Hours

Catalog Notation: 2-2-3

Credit Hour Distribution:

Lecture: 2

Lab: 2

Clinical: 0

Total: 3

General Course Information

Catalog Description

Basic skills for creating websites covering a range of topics from HTML5 and CSS3 to basic usage of common design patterns and web frameworks. Covers use of common tooling and online resources for building websites.

General Course Objectives

To provide students with the skills and techniques to create business-oriented/marketing websites using HTML and HTML5, and CSS and CSS3. Introduction of editing tools, web resources, common design patterns and frameworks for building websites. Goal is to introduce free and cost effective tools for students by exploring open source or low-cost popular resources to build websites. Emphasis on fundamental Frontend programming skills and how they fit into being a Full-stack developer.

Minimum Placement Levels

English

None

Reading

None

Math

None

Prerequisites

None

Methods of Evaluation

Hands-on projects, book exercises, and quizzes to apply skills for creating web pages. Students will create pages and upload finished files and screenshots to Cobra. The final project will be a fully integrated website. Grades broken into 10% Module Quizzes (5 quizzes total), 25% Module Projects (3 projects total), 40% Module Exercises (10 exercises total), 25% Final Project.

Instructional Materials and Additional Supplies

Learning Web Design, A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics, 5th edition,

Jennifer Niederst Robbins. 978-1-491-96020-2

USB storage device \$10

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
File Management	1. Manage files (rename, copy, move, delete, create, and use folders). 2. Name the path to locate a file. 3. Name the parts of a URL. 4. Upload files to free web space. 5. Use W3schools website as a reference.	2	2	0
HTML5	1. Use HTML/HTML5 syntax rules. 2. Use structure tags to create template. 3. Use headings and paragraphs for text. 4. Use relative and absolute links. 5. Add attributes to tags. 6. Use HTML5 syntax rules. 7. Create template page to include required structure codes for DOCTYPE, namespace, and encoding. 8. Use W3C validator. 9. Use empty elements. 10. Use nested elements.	4	4	0
CSS/CSS3 Syntax	1. Use CSS/CSS3 syntax rules. 2. Use style rules to separate content from format. 3. Create and link external style sheet. 4. Use valid units of measurement. 5. Use web-appropriate fonts. 6. Use web-safe color codes. 7. Use CSS/CSS3 validator. 8. Create internal style sheet. 9. Create inline style rules. 10. Create class selectors. 11. Create id selectors. 12. Create compound selectors. 13. Use shorthand style rule syntax.	4	4	0
Google or Firefox Dev Tools	1. Compare and evaluate Google Dev Tool and Firefox Dev Tool for viewing source code, inspecting code, responsive design, and overview of error output.	2	2	0
CSS/CSS3 Styles	1. Create internal style rules. 2. Create and edit style rules. 3. Create and apply custom classes. 4. Link external style sheet.	4	4	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Images/Links	1. Prepare appropriate image file types for web use. 2. Download images. 3. Locate and use relative links. 4. Use absolute links. 5. Create named anchors.	2	2	0
Introduction of Frameworks and Tools	1. Describe application of various frameworks and tools for Frontend development. 2. Apply various frameworks and tools for Frontend development.	2	2	0
Page Layout with CSS/CSS3	1. Demonstrate div and html5 semantic layouts. 2. Create page layout using div/html5 semantic layouts. 3. Customize container properties. 4. Use accessible table coding. 5. Use CSS/CSS3 to create page layout. 6. Create compound selectors. 7. Demonstrate table use, div use, and new frameworks/HTML5 semantics.	4	4	0
Forms	1. Create interactive forms. 2. Store data results from form results in some fashion such as email, query string, or another other resource. 3. Add accessibility features to forms.	2	2	0
JavaScript/JQuery Discussion	1. Describe application of JavaScript and jQuery.	2	2	0
Search Engine Optimization	1. Create meta description tags. 2. Create meta keywords tags. 3. Create effective title content. Submit pages to search engine. 4. Optimize valid use of HTML/HTML5 elements. 5. Optimize text content for favorable listing in search engines.	2	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	30	0