

Glendale Unified School District

Middle School

July 11, 2023

Department: Career Technical Education

Course Title: Web Design 1

Course Code: 8877GV

Grade Level(s): 7-8

CTE Industry Sector: Information and Communication Technologies

Pathway: Software and Systems Development

School(s) Course Offered: Roosevelt STEAM Academy

UC/CSU Approved (Y/N, Subject): N/A

Course Credits: 5

Course Hours: One Semester for Middle School, 80-90 hours

Recommended Prerequisite: None

Recommended Textbook: CodeHS Online Program (codehs.com)

Course Overview: Web Design course is a project-based course that teaches students how to build their own web pages. The course is designed for complete beginners with no previous background in computer science. The course is highly visual, dynamic, and interactive, making it engaging for new students. In the broader course pathway, the Web Design course is a great starting place for a career.

Course Goals: By the end of this course, students will be able to:

1. Explain how web pages are developed and viewed on the Internet
2. Analyze and fix errors in existing websites,
3. Create their very own homepages/single page websites.

Student Objectives: This course provides a comprehensive introduction to web design and an in-depth exposure to HTML and CSS to create live homepages to serve as portfolios of students' creations.

Instructional Strategies: The course utilizes a blended classroom approach. The content is fully web-based, with students writing HTML and CSS in the browser. Teachers utilize tools and resources provided by the platform to leverage time in the classroom and give focused 1-on-1 attention to students. Each unit of the course is broken down into lessons. Lessons consist of video tutorials, short quizzes, example web pages to explore, and web design exercises in which students develop and publish their own web sites.

Instructional Materials: Students write HTML and CSS code in the browser using the CodeHS online editor. Classes can choose to write code using either blocks or text. Due to the fact that different browsers treat HTML and CSS differently, student computers must be an up-to-date version of the Chrome browser

Assessments: Each lesson includes at least one formative short multiple-choice quiz. At the end of each unit, students take a summative multiple-choice unit quiz that assesses their knowledge of the concepts covered in the unit.

Unit 1: Getting Started - What is the Web?

(2 weeks/10 hours)

Standards

Anchor Standards: 2.8, 4.3, 5.1, 5.3, 5.4, 5.6,

Pathway Standards: C7.1, C7.2, C7.3, C7.4, C7.5, C7.6

Academic Standards: Language Standards 11-12.1, 11-12.2,

Reading Standards: 11-12.3, 11-12.7

Writing Standards: 11-12.2, 11-12.4, 11-12.6, 11-12.8, 11-12.9

A. Objectives / Topics Covered

- Course introduction
- Goal setting
- The Internet
- URLs
- How a web page gets to your computer

B. Assignments / Labs

- Example exercises:
- Free Response: "When you think of the Internet, what comes to mind?"
- "What would you like to learn in this course?"
- Brainstorm something you would like to create "Wouldn't it be great if..."
- Why is the Internet often called "The Web"?
- Explain the steps it takes for a web page to get to your computer
- Class Activity: The Internet Then and Now
Students investigate the capabilities of the Internet 20 years ago, 10 years ago, today, and looking forward to the future

Unit 2: HTML - Structuring Websites

(8 weeks/40 hours)

Standards

Anchor Standards: 6.0, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9,

Pathway Standards: C7.1, C7.2, C7.3, C7.4, C7.5, C7.6,

Academic Standards: Language Standards 11-12.1, 11-12.2

Reading Standards 11-12.3, 11-12.7,

Writing Standards: 11-12.2, 11-12.4, 11-12.6, 11-12.8, 11-12.9

A. Objectives / Topics Covered

How do we build web pages?

- Markup Languages
- HTML, HTML tags, HTML attributes, HTML elements
- The Anatomy of an HTML page
- Formatting text
- Hyperlinks
- Images
- Copyright fair use
- Lists
- Nesting tags
- Tables
- Styling with HTML
- HTML Colors

A. Assignments / Labs

- Students create several web pages to practice each of the concepts above
- Example exercises:
- Modify existing web pages using formatting tags to make text more readable
- Use links to create a web page linking to your 5 favorite websites
- Use links and images to create a personal library webpage showing your favorite books
- Use lists and images to create a flashy list article
- Use tables to create a personal calendar web page

- Use styling attributes to add style to your web pages

Unit 3: CSS - Styling Websites

(4 weeks/20 hours)

Standards

Anchor Standards: 2.8, 4.0, 4.1, 4.2, 4.3, 5.1, 5.3, 5.4, 5.6, 10.1, 10.2, 10.4, 10.5

Pathway Standards: C7.1, C7.2, C7.3, C7.4, C7.5, C7.6, Academic Standards: Language

Standards 11-12.1, 11-12.2, Reading Standards 11-12.3, 11-12.7, Writing Standards: 11-12.2, 11-12.4, 11-12.6, 11-12.8, 11-12.9

A. Objectives / Topics Covered

How do we style web pages?

- CSS vs HTML
- CSS Selectors
- Selecting by tag
- Selecting by class
- Selecting by id
- The Cascade (order of selector precedence)

B. Assignments / Labs

Students create several web pages to practice each of the concepts above. Example exercises:

- Use CSS selectors to style your previous web pages
- Use CSS selectors to style new web pages
- Create a music library web page and use CSS to style each song in your table
- Use CSS styling to make several images fit together properly
- Explain the benefits CSS provides over styling with only HTML
- Identify CSS selectors and rules used on example web Pages

Unit 4: Project - Create Your Homepage

(2 weeks/10 hours)

Standards

Anchor Standards: 4.0, 4.1, 4.2, 4.3, 10.1, 10.2, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10, 10.11, 10.12, 10.13,

Pathway Standards: C7.1, C7.2, C7.3, C7.4, C7.5, C7.6,

Academic Standards: Language Standards 11-12.1, 11-12.2

Reading Standards 11-12.3, 11-12.7,

Writing Standards: 11-12.2, 11-12.4, 11-12.6, 11-12.8, 11-12.9

A. Objectives / Topics Covered

- Combination of the concepts learned thus far
- Allow students to think creatively about the applications of the concepts they have learned
- Designing a web page from scratch

B. Assignments / Labs

Students will build their own website about themselves. This site will be accessible on their own custom url on the platform site, and will be continually improved by the student as they continue on in the course. It will serve as a running portfolio of each creative project they create in the course.

Total Hours	Class Hrs	Lab Hrs
170	70	100