Web Design

Course Syllabus and Planner

Course Overview

The CompuScholar **Web Design** curriculum is a one-year (two-semester) course covering required topics in most introductory "Web Design" classes. This course has been aligned to specific course standards in many states. Please visit our course description page for a video tour and alignment information.

https://www.compuscholar.com/schools/courses/web-design/

Students should have minimal computer usage skills (e.g. keyboarding, mouse, and operating system navigation, text file editing) prior to starting this course.

Teaching Strategies

The course material is designed to appeal to a variety of students, from traditional learners who thrive on written text to audio-visual students who enjoy a multi-media format. All content is delivered through an online system that allows students to work seamlessly both in the classroom and at home.

Labs and Programming Environment

Every chapter contains one or more hands-on programming labs where students will design or implement web pages to demonstrate understanding of the lesson topics. Students will get the opportunity to work on individual and group projects and will experience all phases of a project lifecycle, including requirements, design, implementation, and testing.

During the first semester, hands-on labs will be completed using simple text editors (e.g. Notepad or TextEdit) build into their Windows or Mac OS operating systems. We introduce the free, cross-platform Komodo Edit software during the second semester to provide advanced HTML editing features. Alternative IDEs may be used at teacher discretion.

Course Planner

A typical school year consists of approximately 36 calendar weeks or 180 days of school. The course plan covers approximately 168 school days, with additional time allocated for review, make-up work, individual projects and Supplemental Lessons. Each "day" listed below represents one typical class period of 45 – 60 minutes, so students will typically work 3-5 hours per week. The suggested number of days factors in 1 day per lesson & quiz, 1 day per lab, and 1 day per test. Some classes may move faster or slower than the suggested pace.

Each chapter contains multiple lessons, quizzes and a chapter test in addition to the listed Lab assignments. **Completion of in-lesson "Work with Me" exercises is required in order to successfully finish the ongoing web site projects in each semester.** Teachers may utilize Supplemental Lessons as desired to meet state standards or student interest. Team Projects and other assignments may be adjusted to fit the available time.

Days	Reading and Objectives	Labs
5	**Chapter One: Web Tools and Languages** • Web Browsers • The Language of "Mark-up" • File Naming and Extensions	**Secret Message Hunt** Practice viewing existing HTML source code.
6	**Chapter Two: Your First Web Page** • Root Directories • Home Pages • Essential HTML Symbols • HTML File Layout	**Body Text Experiments** Use **<strong>** and ** ** elements for formatting.
5	**Chapter Three: Head and Body Elements** • Header Elements • Body Elements • Highlighting Content	**Silent Owl** Add a **<blockquote>** to the page

Days	Reading and Objectives	Labs
5	**Chapter Four: Organizing Content** • Dividing Up Your Page • Keeping It Neat • HTML Lists	**Make an Un-ordered List** Create a list on the page
7	**Chapter Five: Connecting Your Site** • Bookmarks and Hyperlinks • The Internal (Relative) Link • The Navigation Bar • The External (Absolute) Link • Email Links	**Linking Your Raptors Home Page** Add a navigation bar with hyperlinks
7	**Chapter Six: Cascading Style Sheets** • Inline Styles • Choosing Colors • Embedded CSS • Applying CSS Rules • External Cascading Style Sheets	**External Raptors CSS** Create an external CSS file for the Raptors website
5	**Chapter Seven: Common CSS Properties** • Font Styles • Margins and Padding • Styling by ID, Class, or Group	**Raptors Margins and Padding** Adjust margin and padding styles on the Raptors site styles

Days	Reading and Objectives	Labs
5	**Chapter Eight: Styling Links, Backgrounds, and Borders** • Styling Links • Background Images • Borders	**Raptors Borders and Background** Add borders and background to the Raptors site styles
6	**Chapter Nine: Positioning** • Arranging Containers • Positioning Nested Elements • Playing with Layers • Floating Positions	**Positioning Raptors Containers** Float the navigation bar to the left side of the Raptors page
6	**Chapter Ten: Creating Your Brand** • Design Principles • Styling the Banner • Creating Custom Bullets • Styling Navigation Bars	**Brand Research –** Review and analyze existing websites for effective use of color and graphics. **Branding Raptors –** Add several color and graphical touches to the overall Raptors site styles
5	**Chapter Eleven: Working with Graphics** • Finding and Editing Images • Adding Images • Positioning and Styling Photos	**Cropping and Editing the Great Grey Owl** Practice editing and optimizing a web image. **Creating Other Raptors Sub-Pages** Use templates to create additional pages in the Raptors website

Days	Reading and Objectives	Labs
5	**Chapter Twelve: Tables** • Adding a Table • Table Formatting • Finishing Touches for Tables	**Raptors Size Table** Create and style a new table comparing Raptor sizes
6	**Chapter Thirteen: Web Site Design Strategies** • Project Planning • Accessibility • Static, Dynamic, and Interactive Sites • Search Engine Optimization and Marketing	**Storyboard and Site Map** Practice creating a storyboard and site map for a chosen website topic
10	**Chapter Fourteen: Mid-Term Project** • Online Research • Build Your Website • Evaluation and Feedback	Students will work in teams to research, design, create, test, and review a website on a topic of interest.
7	**Chapter Fifteen: Computers and Networks** • Survey of Computer Hardware and Software • Internet History and Structure • Networking Components and Addressing • Network Topology • Network Protocols	**Investigate Your Environment** Study how the networking infrastructure works at your home or school.

Days	Reading and Objectives	Labs
8	**Chapter Sixteen: Tools and Trends** • Computer Ethics • Web Security • Emerging Trends in HTML5 • Web Editing Tools • Komodo Edit Projects	**Install Komodo Edit** Install the software package and prepare for use. **Aquamaniacs Home Page Layout** Configure the initial home page.
7	**Chapter Seventeen: HTML5 Concepts** • HTML5 and Web Browsers • Defining Areas with Sections • Headers and Footers • Articles, Asides and Navs	**Analyzing Websites for HTML5** Review existing public websites to see how they use HTML5 **Styling Articles and Asides** Apply styles to the articles and asides on the Dolphins page
5	**Chapter Eighteen: Figures and Annotations** • Figures and Captions • Figure Annotation with Relative Positioning • Dynamic Annotations	**Leaping Dolphins** Apply site-wide styles to figures and captions
5	**Chapter Nineteen: Adding Audio and Video** • Linked and Embedded Videos • HTML5 Video • HTML5 Audio	**Sound Bites** Add sound clips to a new page

Days	Reading and Objectives	Labs
6	**Chapter Twenty: Introducing CSS3** • Browser Compatibility • Colors and Transparency • Advanced Borders and Shadows • Custom Fonts	**Branding Aquamaniacs** Apply several CSS features to get the main Aquamaniacs look and feel.
5	**Chapter Twenty-One: Cool CSS3 Features** • Advanced Backgrounds • Gradients • Image Transformations	**Grooving and Shaking** Apply transformations and other features to sample fish images
5	**Chapter Twenty-Two: Relationship Selectors** • Parent-Child Relationships • Parent and Child Selectors • Sibling Selectors	**Emperor Penguins** Style a new page using relationship selectors
5	**Chapter Twenty-Three: Pseudo-Selectors** • Pseudo-Class and Pseudo-Element Selectors • First and Last Child Pseudo-Selectors • Numbered and Combined Selectors	**Lobsters** Style a new page using pseudo-selectors
5	**Chapter Twenty-Four: Dynamic Menus** • Dynamic Menus and Nested Lists • Styling First-Level Dynamic Menus • Styling Second-Level Dynamic Menus	**Lionfish** Add dynamic annotations to a new page

Days	Reading and Objectives	Labs
6	**Chapter Twenty-Five: Introducing JavaScript** • JavaScript Concepts • JavaScript Events and Functions • Managing Elements with JavaScript • External JavaScript Files	**Cuttlefish** Add JavaScript behavior to a new page
6	**Chapter Twenty-Six: Dynamic Pages with jQuery** • The jQuery Library • jQuery Syntax and Page Loading • jQuery Events • Hiding and Showing Elements	**Otters** Add jQuery behavior to a new page
5	**Chapter Twenty-Seven: jQuery Special Effects** • Fading and Sliding • Timing and Multiple Effects • jQuery Animation	**Dancing Octopus** Create an animation using jQuery
10	**Chapter Twenty-Eight: Final Project** • The Big Picture	**Start to Finish** Students will follow the same basic steps as the mid-term project and work in teams to research, design, create, test, and review a website on a topic of interest.

Days	Reading and Objectives	Labs
As desired	**Supplemental Lessons** • Evaluating Web Hosts and Servers • Domain Name Registration • Using Search Engines • Project Management • Video Editing • Java Applets • Technical Writing • Web Development Roles • Validation and Analytics Tools • Image Maps • HTML Forms • HTML Frames • Student Organizations	Supplemental Lessons may be added by the teacher as desired to meet state standards or satisfy student interest.