

# CIW Site Designer Series Course: Design Methodology and Technology (Adobe CS4 Web Edition) v9.0



*Design Methodology and Technology* teaches you how to design and publish Web sites. General topics include Web Site Development Essentials (such as the site development process, customer expectations, and ethical and legal issues in Web development), Web Design Elements (such as aesthetics, the site user's experience, navigation, usability and accessibility), Basic Web Technologies (such as basic Hypertext Markup Language [HTML], Extensible HTML [XHTML] and extended technologies, image files, GUI site development applications, site publishing and maintenance) and Advanced Web Technologies (such as multimedia and plug-in technologies, client-side and server-side technologies, and Web databases).

In this course, you will work with popular production tools such as Microsoft Expression Web, and Adobe Dreamweaver and Flash. You will study design and development technologies such as Cascading Style Sheets (CSS), Extensible Markup Language (XML), JavaScript, Java applets, Dynamic HTML, plug-ins, multimedia and databases. You will also explore the extensibility of design tools, incompatibility issues surrounding these tools, and the functionality of current Web browsers.

## Topics

### **Overview of Web Design Concepts**

- Web Technology
- The Nature of the Web
- Web Design Concepts
- New Technologies
- Evaluating Your XHTML Skills

### **Web Development Teams**

- Web Teams and Tasks
- Web Project Management
- Web Project Collaboration
- Your Web Design Portfolio
- Your Web Design Business

### **Web Project Management Fundamentals**

- Web Project Management Phases
- Project Documentation and Communication

### **Web Site Development Process**

- Bottom-Up Approach to Web Development
- Understanding the Business Process
- Defining a Web Site Vision
- From Vision to Strategy
- Web Site Specifications
- The Metaphor
- Mystery Meat Navigation
- The Mindmapping Process
- Creating a Web Site
- Wireframe
- Creating a Web Page
- Wireframe

### **Web Page Layout and Elements**

- Web Users and Site Design
- Effective Web Page Layout
- Branding and the Web
- Color and Web Design
- Fonts and Web Design

### **Web Site Usability and Accessibility**

- Audience Usability and Accessibility
- Defining Usability
- Web Site Usability Testing
- Web Page Accessibility

### **Browsers**

- Browsers and Navigation
- Browsers and Design Considerations
- Browser Adoption
- Major, Minor and Alternative Browsers
- Creating Aliases with TinyURL
- Utilizing CAPTCHA

### **Navigation Concepts**

- Why Is Navigation Critical?
- Primary and Secondary Navigation
- Navigation Hierarchy
- Site Structure, URLs and File Names
- Familiar Navigation Conventions
- Guided Navigation
- Navigation Action Plan

### **Web Graphics**

- Web Site Images
- Digital Imaging Concepts
- Raster vs. Vector Graphics
- Graphics Applications
- Image File Formats
- Creating and Optimizing Images
- Essential Graphic Design Concepts

### **Multimedia and the Web**

- Multimedia and Web Sites
- Current Multimedia Capabilities
- Animation and the Web
- Audio and the Web
- Video and the Web
- Goals of a Multimedia Site
- Multimedia Site Design
- Basics
- User Interaction
- Selecting Multimedia Elements

### **Ethical and Legal Issues in Web Development**

- Ethics and Law in Web Development
- Ethical Issues and the Web
- Legal Issues and the Web

### **HTML and the Evolution of Markup**

- Function of Markup Languages
- SGML: A Short History
- What Is HTML?
- HTML Goals
- The HTML Standard

HTML 1.0 and 2.0  
 HTML 3.0 and 3.2  
 HTML 4.0 and 4.01  
 Separating Format from  
 Structure in HTML  
 Extensible HTML (XHTML)  
 Reference Sites for Web  
 Developers

### **XML and XHTML**

What Is XML?  
 XML Goals  
 What Is an XML Document?  
 Rules for Well-Formed XML  
 HTML Transition to XML  
 What Is XHTML?  
 Applying a Single Standard  
 Consistently

### **Web Page Structure — Tables and Framesets**

Creating Structure with  
 X/HTML Tables  
 Diagramming a Basic  
 X/HTML Table  
 Borderless Web Page  
 Structure  
 X/HTML Frames and  
 Framesets  
 The X/HTML <frameset> Tag  
 The X/HTML <frame> Tag  
 Targeting Hyperlinks in  
 X/HTML  
 The X/HTML <noframes> Tag

### **Cascading Style Sheets**

Style Sheets  
 Cascading Style Sheets  
 Defining and Using Styles  
 Changeable Style Attributes  
 Style Guides  
 Changes from CSS1 to CSS2  
 Page Layout with CSS  
 The CSS Box Model  
 Document Flow and  
 Positioning  
 CSS Positioning Schemes

### **Site Content and Metadata**

Written Web Site Content  
 Internet Marketing and  
 Search Engine  
 Optimization (SEO)  
 Metadata  
 The <meta> Tag and  
 Document Identification  
 The <meta> Tag and Search  
 Engines  
 The <meta> Tag and Delayed  
 File Change

### **Site Development with Microsoft Expression Web 2 — Introduction**

The Transition from  
 FrontPage  
 Microsoft Expression Web 2  
 Expression Web Views  
 Expression Web Menus and  
 Toolbars  
 Opening Web Sites and Files  
 in Expression Web  
 Developing W3C-Compliant  
 Code with Expression Web

### **Site Development with Expression Web 2 — Basic Features**

Page Layout Options in  
 Expression Web  
 Creating a New Web Site  
 Using Expression Web  
 Page Layout with CSS  
 Inserting Images with  
 Expression Web  
 Creating Hyperlinks with  
 Expression Web  
 Creating Image Maps with  
 Expression Web  
 Creating Navigation Bars  
 Using CSS  
 Expression Web's Dynamic  
 Web Templates  
 Pasting Formatted Text with  
 Expression Web  
 Pasting X/HTML content  
 with Expression Web

### **Site Development with Expression Web 2 — Advanced Features**

Expression Web Styles  
 Adding Interactivity to Web  
 Pages  
 Creating Web Forms with  
 Expression Web  
 Connecting to Databases  
 Expression Web Reports  
 Options for Replacing Old  
 Webbots

### **Site Development with Adobe Dreamweaver CS4 — Introduction**

Adobe Dreamweaver CS4  
 Dreamweaver Layout Options

### **Site Development with Dreamweaver CS4 — Basic Features**

Page Layout in Dreamweaver  
 Creating Image Maps in  
 Dreamweaver  
 Creating Templates in  
 Dreamweaver

Importing Content in  
 Dreamweaver

### **Site Development with Dreamweaver CS4 — Advanced Features**

Rollover Images in  
 Dreamweaver  
 Dreamweaver Web Forms  
 Dreamweaver Behaviors  
 Dreamweaver Assets and  
 Library  
 Editing X/HTML in  
 Dreamweaver  
 Jump Menus in  
 Dreamweaver  
 Site Search Forms in  
 Dreamweaver  
 Adobe Exchange

### **Creating Web Pages Using Open-Source Tools**

Open-Source GUI Editors  
 GUI HTML Editors vs. Text  
 Editors  
 Open-Source Text Editors  
 Creating a Static Web Page  
 Using Templates  
 Checking Spelling

### **Image Editing with Adobe Fireworks CS4**

Adobe Fireworks CS4  
 Creating an Image Document  
 in Fireworks  
 Adding Text to Images in  
 Fireworks  
 Cropping Images in  
 Fireworks  
 Image Layers in Fireworks  
 Image States in Fireworks  
 Transparent Images in  
 Fireworks  
 Image Slices in Fireworks

### **Multimedia with Adobe Flash CS4**

Adobe Flash CS4  
 Flash Technology Features  
 Developing with Flash  
 Flash Shapes  
 Color and Fills in Flash

### **Multimedia with Flash CS4 — Timeline, Layers, Symbols and Buttons**

Flash Timeline  
 Flash Layers  
 Saving and Publishing Flash  
 Movies  
 Flash Symbols  
 Flash Buttons  
 Customizing the Flash  
 Library

**Multimedia with Flash CS4****— Tweens**

Flash Tweens  
 Motion Tweens in Flash  
 Shape Tweens in Flash  
 Tweening Text in Flash

**Multimedia with Flash CS4****— Movie Clips**

Flash Movie Clips  
 Adding Sound to Flash Files  
 Adding Flash Movies to  
 X/HTML Files  
 Testing for the Flash Plug-In

**Multimedia with Flash CS4****— ActionScript, Masks  
and Practical Uses**

Flash ActionScript  
 Mask Layers in Flash  
 Using SWF and SVG Files on  
 the Web  
 Flash and Accessibility

**JavaScript and DHTML****Fundamentals**

Why Script?  
 JavaScript and Common  
 Programming Concepts  
 What Is JavaScript?  
 JavaScript vs. Other  
 Languages  
 Embedding JavaScript into  
 X/HTML

Using JavaScript to  
 Communicate with the  
 User  
 JavaScript Functions  
 Using JavaScript for Browser  
 Detection  
 Dynamic HTML (DHTML)

**Plug-Ins and Java Applets**

Plug-In Technology  
 Plug-In Installation  
 Adobe Shockwave and Flash  
 Players  
 Adobe Reader  
 RealNetworks RealPlayer  
 Rich Media Content  
 Creating a Downloadable File  
 Introduction to Java  
 Java Applets  
 Applets and Animation  
 Applet Authoring Tools and  
 Resources

**HTTP Servers and Web  
Applications**

What Is an HTTP Server?  
 Accessing Servers and  
 Services  
 Basic HTTP Server  
 Administration  
 Server-Side Technologies  
 Web Servers and Cookies  
 Enabling, Disabling and  
 Deleting Cookies

Setting Cookie Files  
 XML and Web Applications  
 Syndicated Feeds

**Databases**

Web Design and Databases  
 Database Anatomy  
 Database Queries  
 Database Management  
 System (DBMS)  
 Connecting Web Pages to  
 Databases  
 Database Tools, Products  
 and Programs

**Web Site Publishing and  
Maintenance**

Web Site Testing  
 Web Site Publishing  
 Web Site Hosting  
 Web Publishing with an FTP  
 Client  
 Web Publishing with  
 Expression Web  
 Web Publishing with  
 Dreamweaver  
 Comparing Web Publishing  
 Tools  
 Maintaining Web Sites  
 Web Server and Web Site  
 Security

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**Target Audience**

Web authors, marketing and communications professionals, PR professionals, Webmasters, graphic designers, desktop designers, technical writers, and library scientists.

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**Job Responsibilities**

Implement and maintain hypertext -based Web sites using authoring and scripting languages; create Web content; use Web management tools and digital media tools; and apply human-factor principles to design.

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**Prerequisites**

Prior to taking this course, students should complete the CIW v5 Foundations series of courses or be able to demonstrate equivalent Internet and X/HTML knowledge.