Web Page Design

7815

(2009)

Web Page Design	
Course Description:	Web Page Design is a course intended to develop basic programming skills and Web page layout utilizing Hyper Text Mark Up Language and a variety of software (I.e. Dreamweaver, Photoshop, Flash). It will use a "hands-on" approach and the emphasis will be on real life correlations. The course will cover all the basics and most advanced Web design functions, and it will provide a first step into programming for those interested in computer science or Web related careers.
Grade Level:	10-12
Length of Course:	Frequency: 6 days per 6 day cycle Duration: 44 minutes Length: full year course Credits: 1
Prerequisites:	Successful completion of Intermediate Microsoft Word highly suggested due to the multitude of typing.
Textbook:	Creating Web Pages with HTML

Expected Level of Achievement	Students will be required to maintain a 70% or better. They will be required to come to class prepared to learn.
	    93-100% = A
	    85 – 92% = B
	    77 – 84% = C
	    70 – 76% = D
	    Below 70% = F

Northern York County School District Curriculum

Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	Web designers need to understand how the World Wide Web is structured and operates and learn the basics of HTML used to create Web sites.
Essential Question(s)	How are Web Pages linked on the Internet? What are the basic principles of Web documents?
Vocabulary	Hypertext, WAN, LAN, HTML, web server, web browser, XML, XHTML, tags, attribute, external image, inline image.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Explore the structure of the World Wide Web. -Discuss basic principles of Web documents. -Discussion of copyright issues relating to Web authoring. -Create an HTML document. -View an HTML file using a Web browser. -Use HTML tags for text, headings, paragraphs, and lists. -Insert character tags into an HTML document. -Add special characters to an HTML document. -Insert horizontal lines into an HTML document.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text: *Creating Web Pages with HTML, Third Edition* © 2003, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

Northern York County School District Curriculum

Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	Anchors on a Web page allow users to navigate to areas of interest within the page.
Essential Question(s)	What are hypertext links?
Vocabulary	Anchors, links, hypertext reference, storyboarding, linear structures, hierarchical structures, mixed structures, absolute pathnames, relative pathnames, URL, Hypertext Transfer Protocol, FTP servers, Usenet.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems.	-Create hypertext links between elements within a Web Page. -Create hypertext links between Web pages. -Review basic Web page structures. -Create hypertext links to pages on the Internet. -Explain the difference between absolute and relative path names. -Create hypertext links to various Internet resources, including FTP servers and newsgroups.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

Northern York County School District Curriculum

Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	Web designers must consider how color can affect the overall message of a Web page.
Essential Question(s)	Why is color so important to a Web page?
Vocabulary	Color value, RGB, hexadecimal, tiling, deprecated tags, GIF, interlacing, transparent color, animated GIF, JPEG, PNG, alt, image maps, client side maps, server side maps, hotspot.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Learn how HTML handles color. -Create a color scheme for a Web page. -Work with font sizes, colors, and types. -Insert a background on a page. -Define colors for a Web page and for specific characters. -Explain the different image file formats. -Control the placement and appearance of images on a Web page. -Create a client side image map (rectangle, circle, poly). -Use the ALT attribute.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

Northern York County School District Curriculum

Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	There are different ways to control Web page layout.
Essential Question(s)	What are the advantages to using tables on a Web page?
Vocabulary	Graphical table, fixed width font, proportional font, header, footer, caption, nested, cell, cell span, row span, cell padding, cell spacing, frame, rules, alignment.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Create a text table. -Create a table using the <table>, <tr>, and <td> tags. -Create a table using headers and footers. -Create table headers and captions. -Control the appearance of a table and table text. -Create table cells that span several rows or columns. -Use nested tables to enhance design. -Discuss Internet Explorer extensions for use with tables. -Utilize the pre tag.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	Web Page Design
Content:	Design and layout for publishable Web pages
Key Learning(s):	Frames are another way to control placement of information in a Web page.
Essential Question(s)	What are the reasons for and against using frames on a Web page?
Vocabulary	Frame definition, frame orientation, scroll bars, link target, reserved target names, floating frames.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Create frames for a Web page. -Control the appearance and placement of frames. -Control the behavior of hypertext links on a Web page with frames. -Use reserved target names to specify a target for a hyperlink text. -Create a Web page that is viewable by browsers that support frames and by those that do not. -Modify the appearance of frame borders. -Create and implement floating frames.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	Web sites often collect information from a user with a Web page form.
Essential Question(s)	What is a CGI script?
Vocabulary	CGI script, field, password field, form labels, selection list, option values, option groups, radio buttons, push buttons, submit button, reset button, access key.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Describe CGI scripts. -Review the various parts of an online form. -Create form elements. -Create a hidden field on a form. -Work with form attributes. -Learn how to send data from a form to a CGI script. -Learn how to send form information without using CGI scripts.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	Cascading style sheets are used to improve continuity within a Web site.
Essential Question(s)	Why use cascading style sheets on a web site?
Vocabulary	Inline style, embedded style, external style, style sheet, inheritance, precedence, specific font, generic font, pseudo-class, pseudo-element, block-level element, inline element.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Discuss the history and theory behind the development of CSS. -Create inline, embedded, and external styles. -Explain style inheritance and precedence. -Use CSS to format paragraphs, lists, and headings. -Design a style for hypertext links in their four conditions. -Utilize the id and class attributes. -Create block-level elements with <span> and <div>. -Use CSS to design a page layout.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	JavaScript allows for more user interactivity on a Web Page by creating specialized programs when the page is opened.
Essential Question(s)	What are some of the advantages and disadvantages to using Java Script on a Web page?
Vocabulary	JavaScript, compiling, applet, variable, Boolean variable, null variable, method, operator, expression, assignment operator, arithmetic operator, increment operator, math object, functions, parameters, command block, comparison operator, logical operator, array, loop.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Explain the features of JavaScript. -Send output to a Web page. -Work with variables and data. -Work with expressions and operators. -Create a JavaScript function. -Work with arrays and conditional statements. -Utilize program loops.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	Web Page Design
Content:	Design and layout for publishable Web pages
Key Learning(s):	Multimedia can enhance or detract from a Web pages purpose.
Essential Question(s)	What are the advantages and disadvantages to using multimedia in a Web page?
Vocabulary	Bandwidth, WAV, streaming media, MIDI, embedded object, plug-ins, AVI, MPEG, applet, applet window, executable file, parameter.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Work with external and embedded multimedia files. -Discuss the principles of sound and video clips. -Work with the <embed> tag. -Provide tags for browsers that do not support <embed>. -Create a background sound with Internet Explorer. -Use the <applet> tag to add a Java applet to a page. -Create a scrolling marquee with the <marquee> tag.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	PhotoShop is one of the leading graphic software tools for editing images.
Essential Question(s)	What are some of the PhotoShop tools for editing photographs?
Vocabulary	Palettes, toolbox, context sensitive.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Understand and use the PhotoShop tools. -Use options for each tool. -Create images using layers. -Open and use the various work area palettes.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	PhotoShop tools can also be used to create unique graphic displays and animations.
Essential Question(s)	How can you create a simple animation using PhotoShop and Image Ready?
Vocabulary	Frames, hidden layers, tween.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Use layers to apply layer effects and filters. -Use painting tools and blending modes to create shading effects. -Use tools to select certain areas of a picture. -Create and apply gradients, patterns, and color overlays. -Save images for Web use. -Create animations utilizing multilayered images from PhotoShop transported into Image Ready.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media

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Course Name:	**Web Page Design**
Content:	Design and layout for publishable Web pages
Key Learning(s):	Dream Weaver can add even more creativity and function to a Website.
Essential Question(s)	How can pointers be used to hold memory addresses for data in a program?
Vocabulary	Local root folder, remote information, home page, page properties, Flash.
Grade Level	10-12

Number	Standard	Student Learning Experiences	Procedures for Assessment	Resources
3.7.4.C 3.7.7.C 3.7.4.D 3.7.7.D 3.7.10.D	Identify basic computer operations and concepts. Explain and demonstrate basic computer operations and concepts. Use basic computer software. Apply computer software to solve problems. Utilize computer software to solve specific problems	-Create a root folder and default image folder. -Define local and remote information. -Create a flowchart/layout sketch for Web site. -Work with tables and design elements. -Create hyperlinks and insert special media. -Create an animation in Flash. -Upload/download files to the Web.	Evaluate review questions. Evaluate reinforcement applications. Award points for successful completion of exercises. Evaluate with application exercises, chapter tests, unit tests, book programs, and teacher designed projects.	Student text and workbook: *Introduction to Computer Science Using C++, Third Edition* © 2002, Course Technology, Thomson Learning Teacher-prepared programs Audiovisual Media