

Web Technologies: Grades 10, 11, 12

Adopted 2013

Intro to Web Pages and the WWW

1.1 Define terminology

1. Prepare a list of terms with definitions 1.1.1
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1.2 Identify common web page elements

1. Examine existing web sites for any of the following:
 - URL
 - hyperlinks
 - title
 - navigation1.2.1
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1.3 Identify different browsers

1. Open existing web sites in different browsers 1.3.1
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1.4 Discuss HTML

1. View the source code of existing web sites 1.4.1
 2. Discuss the history of HTML 1.4.2
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1.5 Discuss XHTML

1. Discuss the differences between HTML and XHTML 1.5.1
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Create Web pages using HTML, XHTML, and CSS

2.1 Define terminology

1. Prepare a list of terms with definitions 2.1.1
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2.2 Identify parts of a basic web page

1. Create web pages with the following:
 - Head, Title, and Body Elements
 - Paragraph element
 - Ordered, unordered or definition lists
 - Graphics, font styles, horizontal ruled lines2.2.1
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2.3 Discuss ways to add navigation to a Web site

1. Create web pages with these navigations:
 - identify elements or anchors
 - links between pages
 - pictures as links
 - mail to link
 - link to another website2.3.1
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2.4 Describe ways to enhance a web page

1. Add color to the background of a web page 2.4.1
2. Add various font styles adding color, size, font-family, etc 2.4.2

3. Insert and format graphics 2.4.3
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2.5 Identify uses of image maps

1. Create hot spots and image maps 2.5.1
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2.6 Describe the importance of using tables in web design

1. Create tables for text and graphics 2.6.1
 2. Discuss how to layout a website using a table 2.6.2
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2.7 Discuss the importance of CSS

1. Compare/Contrast styles: Inline, Embedded, and External 2.7.1
 2. Write the code necessary to create an inline style, embedded style, and an external style sheet 2.7.2
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Exploring Graphics in PhotoShop

3.1 Define terminology

1. Prepare a list of terms with definitions 3.1.1
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3.2 Discuss the PhotoShop environment

1. Identify the parts of the environment 3.2.1
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3.3 Identify various methods used to obtain, edit and repair

1. Obtain pictures from the Internet and/or a digital camera 3.3.1
 2. Edit and repair graphics using some of these tools: layer styles, filters, eye dropper tool, blending, liquify, marquee tool, transparent backgrounds, clone stamp tool, free transform, opacity, red eye tool, and more 3.3.2
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3.4 Explain various color techniques

1. Explain the difference between RGB and CMYK 3.4.1
 2. Edit colors in a graphic 3.4.2
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3.5 Explain various typography

1. Insert and format text 3.5.1
 2. Explain why you need to rasterize text 3.5.2
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3.6 Discuss various formats for saving graphics

1. Save graphics as a GIF, JPEG, PNG and more 3.6.1
 2. Optimize graphics for the web 3.6.2
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3.7 Explain how to use layers

1. Create a graphic using multiple layers 3.7.1
2. Flatten the graphic before saving 3.7.2

3.8 Discuss types of graphics that can be created for the web

1. Create a graphic for use on a website, such as a banner, logo, web template, etc. [3.8.1](#)
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Creating Animations in Flash

4.1 Define terminology

1. Prepare a list of terms with definitions [4.1.1](#)
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4.2 Identify the environment

1. Identify many of the parts of the environment [4.2.1](#)
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4.3 Describe how to insert and transform text and graphics

1. Add and format text using some of these: aligning, colors, size, skew, gradient and more [4.3.1](#)
 2. Use the drawing tools to create various objects [4.3.2](#)
 3. Resize, rotate, skew, distort and flip an object [4.3.3](#)
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4.4 Describe the steps necessary to create a tween

1. Create a motion tween [4.4.1](#)
 2. Create a shape tween [4.4.2](#)
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4.5 Discuss reasons for symbols

1. Create graphic, button or movie clip symbols [4.5.1](#)
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4.6 Explain different kind of actions

1. Write introductory level ActionScript [4.6.1](#)
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4.7 Explain how to create a frame-by-frame animation

1. Create a frame-by-frame animation [4.7.1](#)
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4.8 Explain how to create a motion guide for an object

1. Create a motion guide for an object and orient the object to the path [4.8.1](#)
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4.9 Discuss the steps necessary to create a mask effect

1. Create a mask effect [4.9.1](#)
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4.10 Explain different ways to add sound to a video

1. Add sound to a video [4.10.1](#)
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4.11 Discuss why you should use scenes when creating a long movie

1. Create a video with multiple scenes [4.11.1](#)
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4.12 Describe how to publish and export a movie

1. Publish a video using several different options [4.12.1](#)

Understanding Sound

5.1 Define terminology

1. Prepare a list of terms with definitions 5.1.1
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5.2 Discuss audio and audio formats

1. Locate and play various different sound files 5.2.1
 2. Record sound using a sound recorder 5.2.2
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5.3 Explain how to edit music files

1. Open or import music files and edit them using an audio editor 5.3.1
 2. Use various editing techniques such as fade in/fade out, cut or razor, and other audio effects 5.3.2
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5.4 Explain ways to save audio files

1. Save audio files in different formats 5.4.1
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Editing Video

6.1 Define terminology

1. Prepare a list of terms with definitions 6.1.1
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6.2 Discuss video and video formats

1. Obtain videos from the Internet, other sources, and/or a digital camcorder 6.2.1
 2. Explain each of these formats: AVI, MPEG, MOV, RAM, OR WMV 6.2.2
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6.3 Explain the difference between linear and nonlinear

1. Compare/Contrast linear and nonlinear 6.3.1
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6.4 Explain how to edit video files

1. Open or import video files and edit them using a video editor 6.4.1
 2. Use various editing techniques: video effects, transitions, razor, slow motion, and others 6.4.2
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6.5 Explain ways to save video files

1. Save video in different formats 6.5.1
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Planning and Designing a Successful Web Site

7.1 Define terminology

1. Prepare a list of terms with definitions 7.1.1
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7.2 Identify website requirements needs

1. Identify the purpose, audience, and audience needs for the website 7.2.1
2. Discuss web page content that is relevant to the website purpose and appropriate for target audience 7.2.2

3. List reasons for copyright laws 7.2.3
 4. Demonstrate knowledge of website accessibility standards 7.2.4
 5. Make website development decisions based on analysis and interpretation of design specifications 7.2.5
 6. Understand project management tasks and responsibilities 7.2.6
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7.3 Demonstrate best practices for designing a website

1. Discuss the best practices for designing a website including the following: maintaining consistency separating content from design, visual hierarchy, font decisions, web-safe colors, and more 7.3.1
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7.4 Discuss the importance of testing websites

1. Produce website designs that work equally well on various operating systems 7.4.1
 2. Produce website designs that work equally well on various browsers 7.4.2
 3. Produce website designs that work equally well with various resolutions and window sizes 7.4.3
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7.5 Identify good page layout design concepts and principles

1. Discuss good page layout design concepts and design 7.5.1
 2. Develop a site concept and site metaphor 7.5.2
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7.6 Discuss usability, readability, and accessibility needs in the website plan

1. Incorporate basic usability, readability, and accessibility principles into a website design 7.6.1
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7.7 Demonstrate tools to help organize a website

1. Demonstrate knowledge of flowcharts, storyboards, and wireframes 7.7.1
 2. Demonstrate knowledge of a site map or index 7.7.2
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7.8 Demonstrate communication of design and content plans with other

1. Present your design and content plans to others 7.8.1
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Adding Content to a Website using Dreamweaver

8.1 Define terminology

1. Prepare a list of terms with definitions 8.1.1
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8.2 Identify the parts of the environment

1. Identify various windows, views, panels and toolbars 8.2.1
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8.3 Describe how to create a site

1. Create a local root folder 8.3.1
2. Create a site definition 8.3.2

3. Create and save an index page 8.3.3
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8.4 Identify ways to add and format text

1. Add text to a web page 8.4.1
 2. Add various formatting options to text 8.4.2
 3. Format and create text using lists--unordered, ordered, or definition 8.4.3
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8.5 Identify ways to insert and format images

1. Insert and format graphics with alternative text 8.5.1
 2. Add borders to graphics 8.5.2
 3. Set the vertical or horizontal spacing to images 8.5.3
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8.6 Identify ways to link web content

1. Create links using text and images 8.6.1
 2. Create email links 8.6.2
 3. Create anchors 8.6.3
 4. Compare/Contrast absolute and relative paths 8.6.4
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8.7 Explain how to insert rich media

1. Insert video, sound and animation into a website 8.7.1
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8.8 Discuss ways to add navigation to a website

1. Create at least one of these navigation structures: navigation bars, rollover images, objects, buttons created in Fireworks OR Spry menu bars 8.8.1
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8.9 Discuss uses of image maps

1. Create hotspots and image maps on a webpage 8.9.1
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8.10 Discuss uses of tables in websites

1. Import a table into a web page 8.10.1
 2. Create and format tables on a web page using some of these features: merge, split, header, cell padding, cell spacing, and borders 8.10.2
 3. Use tables for web page layout 8.10.3
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8.11 Explain how to import a document

1. Import a document 8.11.1
 2. Import a document 8.11.2
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8.12 Explain how to add a form to a web page

1. Create and format a form using some of these form features: text fields, checkbox, radio button, list menu, etc. 8.12.1

8.13 Discuss dynamic web pages

1. Explore how to make a web site dynamic [8.13.1](#)
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Organizing Content using Dreamweaver

9.1 Define terminology

1. Prepare a list of terms with definitions [9.1.1](#)
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9.2 Discuss web page layout

1. Differentiate between fixed-width, liquid, and elastic layouts [9.2.1](#)
 2. Create web pages using various layout absolutely-positioned div tags CSS tables wrapper/container div tags [9.2.2](#)
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9.3 Discuss web page templates

1. Create a web site using one of the templates [9.3.1](#)
 2. Create and modify a web page template [9.3.2](#)
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9.4 Discuss the importance of making a web page visible to search engines

1. Create appropriate meta tags for a website [9.4.1](#)
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Evaluating and Maintaining a Site by Using Dreamweaver

10.1 Define terminology

1. Prepare a list of terms with definitions [10.1.1](#)
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10.2 Identify basic technical tests

1. Use various technical tests on a website [10.2.1](#)
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10.3 Identify techniques for basic usability tests

1. Use some of these tests: Accessibility report, check for missing alternate text [10.3.1](#)
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10.4 Identify methods for collecting site feedback

1. Collect site feedback from various sources [10.4.1](#)
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10.5 Manage assets, links, and files for a site

1. Use some of these tests on a website: check for broken links, orphaned files, check links sitewide, untitled documents, web-safe colors, site map, validating markup and more [10.5.1](#)
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10.6 Discuss steps necessary to publish a web site

1. Identify steps necessary to publish a website [10.6.1](#)
 2. Explain the difference between uploading and downloading [10.6.2](#)
 3. Explain what it means to synchronize files [10.6.3](#)
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10.7 Explain ways to manage a website with a team

1. Explain checking in/out files 10.7.1