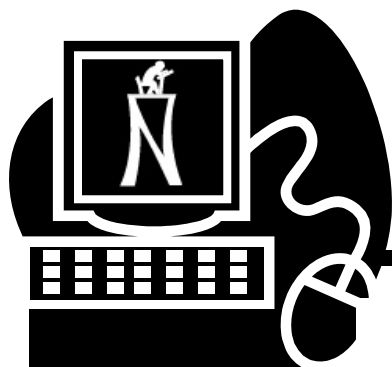


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CSS 200: Web Page Fonts and Colors



**Auxiliary & Classified Staff
Campus Administrators
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Introduction

Cascading Style Sheets (CSS) are powerful tools used to determine the appearance of Web pages. They were created to address an increasing number of non-standard HTML tags that were being used to achieve various visual effects, often with inconsistent results. Style sheets offer consistency and far more power and flexibility than “pure” HTML. Style sheets are also the standard method for controlling the appearance of text in Web pages.

CSS can be used with any Web editing program, such as Dreamweaver, Netscape Composer, GoLive, etc. Some programs, however, have limited capabilities, when it comes to writing CSS. For this reason, we'll work with Microsoft Notepad in this lesson to write CSS directly. This allows us to use CSS with almost any Web page and almost any editing software.

CSS also allow you to update a single page, a few pages, or a whole website much faster and more easily than ever before. An external CSS file can be used to define a set of rules for multiple pages. Making a change to a rule applies the change to every page that uses that rule.

Benefits of CSS?

Cascading Style Sheets allow you write a series of simple rules to control the appearance of nearly all aspects of a website, from simple one-page sites, to a large, complex site with hundreds or thousands of pages. Some of the advantages of CSS include:

- Less time spent in maintenance/updates
- Faster creation of new pages
- Smaller file sizes for pages – your pages will download faster for visitors
- More accessibility for persons with disabilities
- Better consistency in the “look and feel” of pages throughout the site
- Greater control over page appearance than was possible with HTML alone

In short, Cascading Style Sheets will save you time and give you more control over how your site looks. CSS will also make the site more accessible to visitors, especially those with disabilities or with slow Internet connections.

Why “Cascading?”

Cascading refers to the way that Web browsers treat the three kinds of style sheets. There is a “cascade” of style sheets, in which the Web browser resolves any conflicts between style sheets by giving preference to some style sheets. The three types of CSS are:

External style sheets, which can be used by one Web page or an entire Web site. A single page can also link to more than one style sheet. The browser reads the style sheet(s) and uses the style sheet instructions to format the page.

Embedded style sheets are part of the code of a single Web page. The browser gives preference to embedded style sheets, so any embedded instructions that conflict with external style sheets will override the external CSS.

Inline styles are commands within an HTML tag. These are given the highest priority by the browser, meaning that they override both external style sheets as well as embedded styles.

Course Contents

This session will cover the following:

- Learn to master all aspects of fonts with CSS, from line spacing (leading) to word spacing, to space between letters (kerning).
- Find out how to make the first lines of paragraphs indent automatically.
- Add colors to your Web pages, using CSS to change text colors, add background colors to text, and to make links change color when a visitor “mouses over” them!
- Make text boxes, create margins, and more!

Editing Software: Notepad & Dreamweaver

Notepad is Microsoft's text editing program. It is like a very basic word processor, with very few features. This actually works to our advantage in CSS editing, as there are no distracting tools such as automatic text "correction" to interfere with writing CSS. Notepad is therefore the editing tool of choice for many CSS authors.

Macromedia Dreamweaver is an excellent Web page authoring program, but it isn't 100% compatible with some CSS features in the Design View. For that reason, we'll use the Code View in Dreamweaver for some of our work.

Why Learn to Write CSS in Code?

- Some CSS features can only be created in code.
- Working in CSS code helps us to better understand what's really going on.
- The ability to write CSS code allows you to use CSS in CMS Outreach pages, Moodle courses, etc. (by adding inline CSS styles in the HTML code view).

Practice Web Page: Archaeology 101

In the course of this class, we'll modify a simple Web page, provided by your instructor. With this extremely basic page, we'll immediately be able to see the changes made by adding CSS styles to the page. The practice "site" consists of one HTML file and two images. It is available at:

<http://www.nisd.net/technology/training/brown/files/css200.zip>

Designing for Accessibility: Learning to Love "Em"

The em is a relative measure of size for fonts. In style sheets, its size refers to its "parent" element. Think of it this way, an em is expressed in terms of its size in relation to the prevailing text. For example, we could use a style to modify the (bold text) tag, so that its size was

1.1 ems. All text in the page that had been made bold (strong) would appear as bold text, 1.1 times the size of the regular text.

The biggest advantage of using ems as a unit of measure is that Internet Explorer is able to resize CSS text when it's measured in ems. Text defined in pixels or points cannot be resized by Internet Explorer.

Let's try creating the above example in Dreamweaver. The example below shows MX 2004, but Dreamweaver 8 is similar.

Review: CSS Syntax

The rules in Cascading Style Sheets follow a simple, but specific, syntax that isn't hard to learn. Let's take a look at a few simple rules:

```
h1 {color: blue; font-style: italic}
```

The above rules change the way that the `<h1>` (Heading 1) HTML tag works. In a page where these rule are in effect, the contents of all `<h1>` tags will be shown in blue and italicized.



Note the details of how the rules were written:

- The first part – the name of the rule – comes first. The formal term for this part is the ***selector***.
 - In this example, it was the name of an HTML tag whose appearance will be changed.
- The second part – the actual rule – is enclosed in curved brackets.
- The formal term for this part is the ***declaration***.
 - In each of the two rules shown, the ***property*** is followed by a colon and then the ***value***.
 - A semicolon follows the first rule, to separate it from the second rule.

Multiple rules are often listed vertically, in embedded and external style sheets, to make them easier to read and edit. The first bracket is written right after the selector, with each rule on its own line, and the closing bracket below the rules. By indenting the rules, it's easy to see keep track of everything. Two selectors, and their accompanying rules, are shown in the example below:

```
h1 {  
    color: navy;  
    background-color: yellow;  
}  
h2 {  
    font-family: arial, helvetica, sans-serif;  
    color: green;  
}
```

CSS Fonts

Cascading Style Sheets can be used to affect almost any aspect of the way that fonts are displayed in a Web page. We'll start with a review of the basics, by changing the font of the Archaeology 101 page to something that is easier to read than the "default" Times New Roman.

Remember that sans-serif fonts, such as Arial or Verdana, are generally easier to read on a computer screen than are serif fonts like Times New Roman. We'll be creating all of our CSS styles in this class in a single, external CSS file. By linking other pages to this file, we could use these styles throughout an entire website.

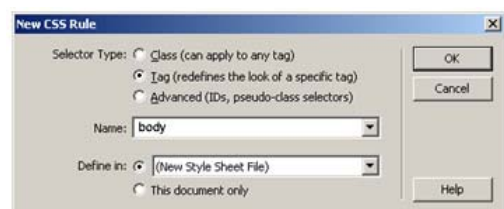
Creating a New Style (Rule) with Dreamweaver

1. If the CSS Panel is not visible, choose the **Windows** menu and select **CSS Styles**.
2. Click the **New CSS Style** icon (+).
3. Fill out the **New CSS Style** (MX 2004) or **New CSS Rule** (Dreamweaver 8) window as shown below.

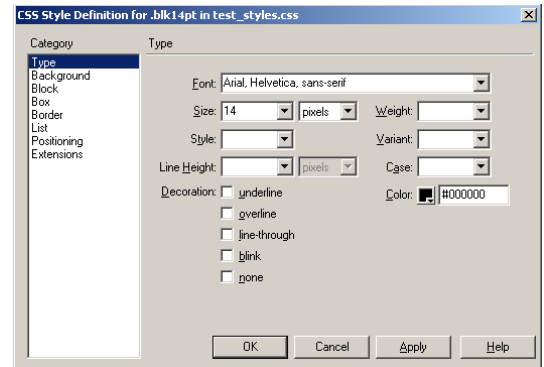
**New CSS Rule window
(DW MX 2004)**




**New CSS Rule window
(Dreamweaver 8)**





4. Under the **Selector Type**, choose **Tag**.
5. Use the Tag drop-down menu to select **Body**.
6. For Define In: choose (**New Style Sheet File**), so that the style will be available to other Web pages in your site. Remember that if you choose **This Document Only**, the CSS information will be saved in the <head> of the document and will not be available for use in other pages.
7. Click **[OK]**.
8. When you choose (**New Style Sheet File**), a **Save Style Sheet File As** window will appear. The file will contain your style sheets, so give it a general name, such as **blattman_styles**. You can have more than one style sheet file, though.
9. In the CSS Style Definitions window, fill in the following information for the new style: Font: **Verdana**, and Size: **1.0 ems**.

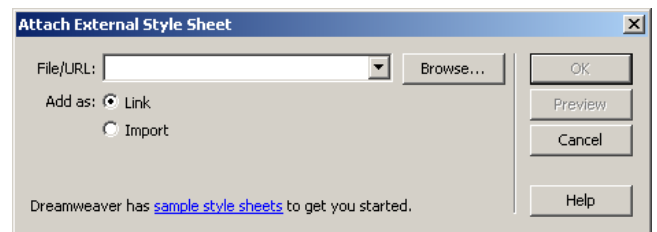


If you need to, you can come back later and edit your style by choosing the style, and clicking the **Edit Style** () icon.

10. As soon as you click **[OK]**, your new style will take effect, changing all text on the page to the font you chose. Press the **[F12]** key to preview the page in Internet Explorer.

Attaching an External Style Sheet in Dreamweaver

1. When you create a new external style sheet, it is automatically attached to the page you are working on at the time. To attach the style sheet to another Web page, follow these steps:
2. In the CSS Styles panel, click the **Attach Style Sheet** icon ( in MX 2004;  in Dreamweaver 8).
3. The Attach External Style Sheet window will appear. Choose the **Link** radio button.
4. Click the **[Browse]** button and find the external style sheet. Click the **[OK]** button to select it.
5. Click the **[OK]** button to close the Attach External Style Sheet window.



line-height

line-height allows us to set the spacing between lines in a Web page. This value is also called *leading*. Leading can be expressed as a number, as a value in points, pixels, ems, etc., or as a percentage. Examples appear below:

```
line-height: 2;
line-height: 12pt;
line-height: 200%;
```

Opening and Editing the External Style Sheet

1. In the Files panel, double-click the new CSS file to open it in Dreamweaver.
2. Modify the body style by adding the text shown in **bold** to the style sheet:

```
body {
    font-family: Verdana, Arial, Helvetica, sans-serif;
    font-size: 1.0 em;
    line-height: 110%
}
```

3. **Save** the CSS file. Switch over to the Archaeology 101 page, and use Preview (**[F12]** key) to see the changes in Internet Explorer.

word-spacing

The word-spacing property gives you the power to control the amount of space between words. It can be expressed in inches, centimeters, points, pixels, ems, or any other measurement that was available to you when we set the <body> font and size.

Let's use it to increase the spacing in the page heading.

1. Switch to the CSS file and add the following CSS style (shown in **bold**) at the bottom of the document:

```
body {
    font-family: Verdana, Arial, Helvetica, sans-serif;
    font-size: 1.0 em;
    line-height: 110%
}
h2 {
    word-spacing: .5 em;
}
```



The changes to **word-spacing** will probably not show until you preview the page in your browser.

2. **Save** the CSS file, switch to the Web page, and **Preview** it.

letter-spacing

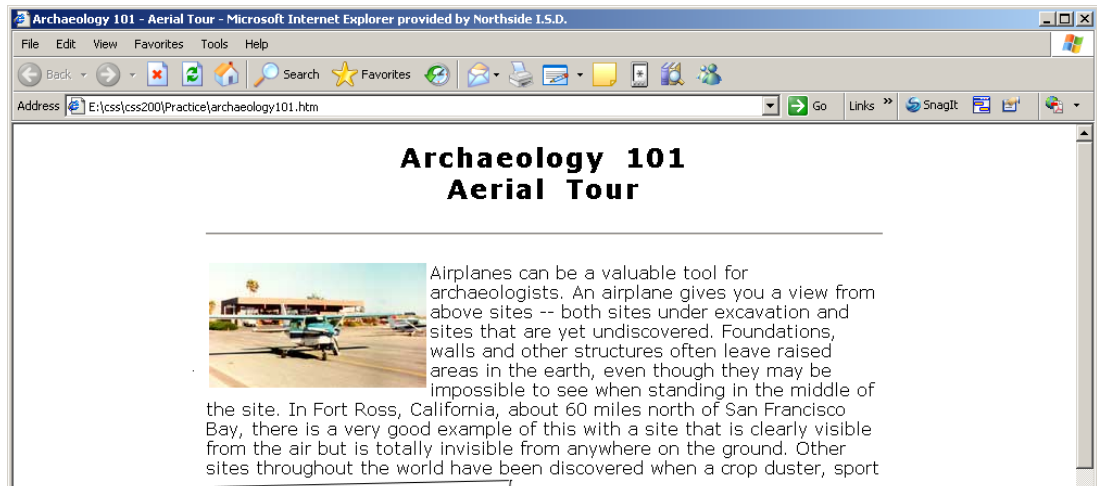
This property is also known as *kerning*. It can accept values similar to those of word-spacing. Whatever value you give it is added to the default kerning. Let's try adding some letter-spacing to the page heading.

1. Switch to the CSS file.
2. Add the text in bold to the heading rules:

```
h2 {  
    word-spacing: .5 em;  
    letter-spacing: 2px;  
}
```

3. **Save** the CSS file, switch to the Web page (you should see the changes in Dreamweaver), and **Preview** it

Here is the top of the Archaeology 101 page, with the default text (<body> tag), line-height, word-spacing and letter-spacing applied:



Text Colors

In the past, the only way to change the color of text (other than making it into a link) used non-standard HTML and therefore brought with it the risk that some browsers might not display the page correctly.

CSS solves this problem. CSS also adds the ability to put background colors behind text, to make it more visible.

Changing the Heading Colors

1. Switch to the CSS file in Dreamweaver. Add the following to the heading rules:

```
h2 {  
    word-spacing: .5 em;  
    letter-spacing: 2px;  
    color: navy;  
}
```

2. **Save** the CSS file and **Refresh** your browser to see the change take effect.

Now any <h2> that you use in this Web page will have your custom word- and letter-spacing, and it will automatically be dark blue in color.

The following 17 color names should work just about everywhere, but be careful of your spelling! Write **grey** instead of **gray**, and you'll probably find that your browser reads the color as **green**!

aqua	green	orange	white
black	lime	purple	yellow
blue	maroon	red	
fuchsia	navy	silver	
gray	olive	teal	

Other colors require that you use a hexadecimal color chart, which is easily found on the Internet.



Hexadecimal color charts can be found on the Web. Try using a search engine with the search words:

hexadecimal color chart

Create a Margin for Images

The photos on the Archaeology 101 page need to have a small amount of space between them and the surrounding text. We'll look at an easy way of creating the rule for the margin.

Our method takes advantage of the clockwise order in which CSS addresses the four sides of an object: Top, Right, Bottom, Left. Eric Meyer suggests remembering this order – T-R-B-L – with the word “trouble.” The method uses the `` (image) tag and will automatically add a small margin around any images placed in the page in the future.



Remember that the order for the margins starts at the top and goes clockwise, so it's:

T – R – B – L

or

TOP
RIGHT
BOTTOM
LEFT

Creating a Margin for Photos

This method is very simplest and requires less work than other methods. We simply use CSS, and the `` tag, to make a margin for all images.


1. Open the external style sheet in Dreamweaver.
2. Add the following rule:

```
img {
    margin: 1px 3px 1px 3px;
}
```

3. **Save** the CSS file and **Refresh** the page in your browser.

Text Boxes


Now we'll bring together several of the things we've learned to create text boxes with CSS. These are useful for long quotes or other text that you would like to highlight and set apart. They work with the `<blockquote>` tag. Notice that we use different borders on the top/bottom, compared to the sides.

In this example, we spell out borders (unlike the margins in the example above), because the sides and top have completely different properties. Any time you use the `<blockquote>` tag (the Text Indent button in Dreamweaver looks like this: ), the selected text will be placed in a pre-formatted text box.

Cascading Style Sheets (CSS) 200: Web Page Fonts and Colors

1. Switch to the CSS stylesheet in Dreamweaver.
2. Add the following rules:

```
blockquote {  
    color: #000000;  
    background-color: ivory;  
    border-top: 1px solid #191970;  
    border-right: 0px;  
    border-bottom: 1px solid #191970;  
    border-left: 0px;  
    padding: 6px;  
    font-size: .9em;  
}
```

3. **Save** the CSS file.
4. Switch to the Web page in Dreamweaver.
5. Highlight the paragraph of Latin text, and click the Indent Text button () to change it to a text box.
6. **Save** the page and **Refresh** it in your browser.