Photoshop CS/CS2
Basic Skills

What is Photoshop?

Adobe Photoshop is available on all campus computers, including PCs and Macs. Photoshop is an image editing software studio in which you can manipulate digital photographs and other graphics in a variety of ways. Did your digital photo come out too dark and you want to brighten it up a bit? Interested in creating some sharp graphics for your website? Just need to add some text to an image? You can do all this and much more in Photoshop. This tutorial will get you started with the basics and on your way to creating and editing some excellent images.

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Creating a New Image

A. Often you will be using Photoshop to edit currently existing images, but in some cases you will want to create an image of your own. To open Photoshop, click on the illustrated icon on the dock in OSX. If you are using a PC or an OS9 system, Photoshop will be located in the Start and Apple menus respectively.
B. Once Photoshop has loaded, go to the File menu and select New.
C. A dialogue box should appear that looks similar to the one illustrated on the right. Begin by entering a file name for your image in the Name field.
D. Next, enter the dimensions of your image. You can choose from a variety of commonly used preset sizes, or enter the Width and Height manually. You can also choose whether you want to represent the dimensions in pixels (as shown) or in another measure, such as inches.

E. Under Mode make sure the RGB Color option is chosen, which is the common color mode, unless you want to work in black and white.

F. Finally, choose whether you want the default color of your image to be White, the current Background Color set in Photoshop, or Transparent. Once you are finished, click OK.

**NOTE:** Transparent backgrounds only work with GIF images. If you are planning on making a graphic for the web, you can use this option. However, GIF images use too few colors for the purpose of more detailed image work.

### Photoshop Toolbars

#### A. Tools

![Tool Icons]

**NOTE:** By right clicking on one of the tool icons that has a small triangle in the bottom right corner, a list of related tools will be revealed. If you are using a one-button mouse, simply hold down <CTRL> while clicking to reveal the additional tools.

**Move Tool** - Use this tool to grab on to the currently selected layer and drag it around the image until you’re satisfied with its position.

**Lasso Tool** - The lasso tool is very useful. It is used to cut out a specific section of a layer. For instance, perhaps you want to cut a person out of an image and paste him/her into another. The lasso tool can be used to trace around the person to achieve the desired cut. The magnetic lasso tool can be used to achieve the cut quicker, but sacrifices precision.
Magic Wand Tool – This tool is similar to the lasso in that it will select a certain area that can then be cut or copied. However, the magic wand automatically attempts to trace a border around an object in an image. You usually get the best results with the magic wand if the background of your image is a solid color or very different from the colors of the object you want to cut out of the image.

Crop Tool - If you have a large image and want to cut out a specific section of it, such as an animal out of a large forest scene, you can use the crop tool to highlight a specific rectangular area and then crop that area into its own image.

Paintbrush Tool - Just like it sounds, this tool is used to draw like you would with a paintbrush. You can change the shapes and sizes of the brush strokes.

Type Tool - Use the type tool to create a text layer for your image. Text attributes such as font, color, size, style, and orientation can all be modified.

Eye Dropper Tool - If there is a specific color in an image that you want to duplicate and use somewhere else in the image, use the eyedropper tool. Simply click on an area of the image that contains the color, and the eyedropper tool will send that color to the color palette.

B. Options

1. The Options Toolbar allows you to manipulate the attributes of each different tool. For instance, shown above are the options for the Text Tool. You can change the font, style, size, alignment, and color. The Options Toolbar will change and display new attributes when a new tool is selected.

2. If the Options Toolbar isn’t present when you open Photoshop, you can display it by going to the Window menu and selecting Options.

C. Palettes

1. There are many menus in Photoshop known as palettes that greatly ease the job of manipulating and editing your images. The most important palettes to know are the History, Color, and Layers Palettes. They are illustrated here but will be gone over in more detail later.
Rotating

A. To rotate an image, begin by going to the **Image** menu and selecting **Rotate Canvas**.
B. Under this selection, there will be six choices you can pick from: $180^\circ$, $90^\circ$ CW, $90^\circ$ CCW, Arbitrary, Flip Horizontal, and Flip Vertical. Select whichever choice is needed to properly orient your image. For example, if your image is upside down, you will want to choose $180^\circ$. This will rotate your image so that it is right side up. If your image is slightly askew, choose **Arbitrary** to indicate the number of degrees you want to rotate the image in order to straighten it.

Resizing

A. To resize an image, begin by going to the **Image** menu and selecting **Image Size**.
B. In the **Image Size** window, you will see two boxes titled **Pixel Dimensions** and **Document Size**.
C. You can edit the dimensions of your image either by changing the number of pixels within the image, or by changing the width and height of the image. Changing the width and height of the image in inches under the **Document Size** box is the easiest way to resize your image accurately.
D. However, another way to change the image size is to select the drop-down menus next to the **Width** and **Height** fields and change the selection from inches to percent. Now, by typing in **50%**, you will halve the size of your image. Typing **200%** will double the size of your image.

**NOTE:** Since the **Constrain Proportions** box is checked, you only need to change the value of either the width of height and the other value will automatically be changed in order to keep the image dimensions in proportion. Also, remember that increasing the size of your image will reduce image quality. Increasing the size of the image by a large amount is not recommended.

E. Now simply press the **OK** button and your image will change sizes.

Cropping

A. To crop an image, go to the **Tools Toolbar**, which should be located on the left of the screen, and select the **Crop Tool** (If the **Tools** toolbar is not present, go to the **Window** menu and select **Tools**).
B. Now, click and drag the cursor over the portion of the image that you want to crop and keep. The cropped area that you just selected should now be outlined and brighter than the rest of the image. You can adjust the area by clicking on one of the handles and dragging it in the desired directions.
C. Go to the **Image** menu and select **Crop**. Your new, cropped image should appear on the screen.
Text

A. To add text to an image, begin by selecting the **Type Tool** from the **Tools Toolbar**.

B. Click and drag the cursor over the portion of the image you wish to add text to.

C. Type the desired text. Notice also that the **Options Toolbar** has changed to reveal text attributes that you can edit. Use this toolbar to change the font type, size, style, color, etc.

D. Once you are finished typing in your text and editing the font properties, click the **Commit Any Current Edits** button (it looks like a check mark) at the right of the **Options Toolbar**. This will verify and submit your text entry.

History Palette

A. In Photoshop, it is often the case that you will need to revert to a previous state of your image, due to mistakes made or changes in your intended design. Unfortunately, the **Undo** command only works for the last action. If you need to go back to an even earlier stage of your image, you will need to use the **History Palette**.

B. The **History Palette** is very easy to use. If you do not see it located on the right of the screen, go to the **Window** menu and select **History**.

C. The **History Palette** will display all the actions that you have performed on a given image in descending order. To return to a previous state, simply locate and select the desired action on the **History Palette**, and your image will accordingly revert back to that state. You can then start working on your image from this previous state, just as if you had performed several undos.

Layers

A. What is a Layer?

In Adobe Photoshop, the ability to create, move, and manipulate layers is key to successful image design. To understand what a layer in Photoshop is, simply picture several sheets of glass with different pictures on them stacked in a pile. The pictures on the top sheet of glass will overlap any pictures on the sheets of glass beneath. If you wanted to wash off a picture on the middle layer of glass, you could do so without affecting the pictures on the other sheets of glass. This is exactly how layers work in Photoshop. They are designed so that you can edit and change specific aspects of your overall composite image without going through the hassle of editing the entire image. In short, layers simplify many image manipulation and editing techniques that would be otherwise very difficult or even impossible.
B. Layers Palette

- **Selecting Layers** - The Text layer is highlighted. This means that any changes made to the image at this point will only affect that layer. Anything on the Background layer will remain unchanged. Simply click once on a specific layer to select it for editing.

- **Moving Layers** – If you have several layers in your image and want to rearrange the order in which they are “stacked”, simply go to the Layers Palette, click on the layer you wish to reorient in the hierarchy, and drag it up or down until it is where you want it.

- **Deleting Layers** – To remove a layer from your image, select it in the Layers Palette, and click the Delete Layers icon, which resembles a trashcan, in the lower right corner of the layers palette.

- **Creating Layers** – To add a new layer to your image, click the Create a New Layer icon, which resembles a piece of folded paper, in the lower right corner of the layers palette next to the Delete Layers icon.

- **Hiding Layers** – You can temporarily hide a layer so that you can more easily work with layers beneath it by clicking in the box to the left of the layer, which contains the icon of the eye. If the eye is present, it means the layer is visible. If there is no eye in the box, the layer is currently hidden from view.

- **Changing the Opacity of Layers** – In some cases, you may wish to make a specific layer appear transparent so that the preceding layer can be seen through it. To accomplish this effect, simply adjust the Opacity Controls. In the example image of the Layers Palette above, the opacity is currently set to 100%. Try changing the opacity percentage until your achieve the desired effect.

- **Renaming Layers** – If your image has many layers, it would probably be a good idea to give each layer a name that will help you to quickly identify it. To change the name of an existing layer, double click on the existing title and then change the name to whatever you like.

- **Creating Sets** – To better organize layers within your image, you can create sets. Sets are simply groups of layers organized according to some common characteristic. For instance, perhaps several layers of your image together create a bear. You might want to group all of those layers together and put them in a set titled “Bear”. To create a set, click on the Create a New Set icon, this resembles a folder, at the bottom of the Layers Palette. To add layers to the set, simply click and drag them into it.

- **Adding Layer Effects** – Photoshop includes all sorts of cool effects that can be applied to specific layers. Some of these include drop shadow, glow, bevel, and emboss. They can be applied to both image and text layers. All you need to do is select a layer and click on the Add a Layer Style icon. It’s the little circle with the “F” in it at the bottom of the Layers Palette. A drop-down menu will pop up where you can choose an effect and then modify its attributes.
C. Add a Drop Shadow

1. To add a drop shadow to your image, an effect that is particularly enhancing to text, begin by going to the **Layers Palette**.
2. Once there, select the layer that you want to apply the drop shadow to. Then click the **Add a Layer Style** icon (the circle with the "F" inside) at the bottom of the palette, and then choose **Drop Shadow**.
3. Once the **Drop Shadow** window appears, there are many options you can choose from to edit its attributes, such as color, opacity, angle of the light source, etc.
4. Notice also that as you change the attributes of the drop shadow, you can view the changes as they will appear on your image. However, none of the changes are permanent until you click **OK**. To the right is an example of a text layer with a drop shadow applied.

### Color Adjustments

A. Often when working with an image, especially one that has been scanned or imported from a digital camera, you will want to change either the color balance or the brightness/contrast of the image.

B. If you want to change the color balance of an image, say of an apple that appears too dull, then begin by going to the **Image** menu, choosing **Adjustments**, and finally selecting **Color Balance**.
C. In the **Color Balance** window, you can change the colors of your image by adjusting the scroll bars towards any of six colors (cyan, red, magenta, green, yellow, and blue) and for any of three tone balances (shadows, midtones, and highlights). As you are adjusting these colors, you can see the result on the image. Once you have achieve the desired alteration, simply click **OK**.

D. If your image is too bright or too dark, you can fix this problem by going to the **Image** menu, choosing **Adjustments**, and then selecting **Brightness/Contrast**. As with adjusting the color, you can simply use a scroll bar or enter a value in a field to change these attributes. When you are satisfied with the result, click **OK**.

Here are some examples of a change in color balance and a change in brightness.

**Color Balance**

![Before](image1.png) ![After](image2.png)

**Brightness**

![Before](image3.png) ![After](image4.png)
Saving Your Image

A. Once you have completed work on your image, it is time to save it. The format in which you save your image is dependent upon its purpose. For instance, if you plan on using the image as a web graphic, you will save it as either a GIF or JPEG. But, if you want to save the image to print, as in the case of a digital photograph, you will probably want to save the image in TIFF format.

B. To save your image, begin by going to the File menu and selecting Save As.

C. In the Save As window, you should start by giving your image a name. Then, select the Format drop-down menu and choose the proper format for your image. Then click Save. Below is a table of possible image uses and the formats that work best for each particular purpose.

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<tr>
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NOTE: When saving as a JPEG, the JPEG Options window will appear after you click Save. You will be asked to set the quality of the image on a scale of 1-12, one being the lowest image quality, twelve being the highest. However, setting the quality at 12 also results in the largest file size. Thus, it is usually a good idea to set the quality somewhere between 6-8 when saving your image. Finally, click OK. Your image has now been saved.

For questions or comments regarding this document, please e-mail docxteam@hamilton.edu.