Photoshop CS part 1

Photoshop is the premier digital photo editor application used for photo retouching, creating web images, film/video compositing, and other pixel/vector-based imagery.

Workshop Objective

Learn to create and capture/scan source files, work with image size, resolution, basic selection tools, layers and crop and rotating techniques.

Getting Started

Quit all open applications
Single click Adobe Photoshop from the Dock

Work Environment and Window Descriptions

The default workspace holds numerous tools and palettes that may be intimidating at first. You can choose to work with them or without them, move them off-screen or even customize which palettes are visible. Setting up your own personal workspace may take time initially or you may be fine with the default. Either way you can get acquainted with many of the tools and palettes by moving your mouse over them and reading the popup messages that appear.

There are four main components in the Photoshop window environment:

Menu Bar: Photoshop File Edit Image Layer Select Filter View Window Help

Organized by function, press any menu heading to access dialog boxes, submenus, and commands.

Palettes:

There are 19 movable palettes. Each palette allows for easy access to different operations in Photoshop. Click a tab (the palette name) in a palette group to bring that palette to the front. Click the black arrow on the top-right of the palette to access more options and commands. There may also be icons at the bottom of the palette which enable you to add or remove items in the palette.
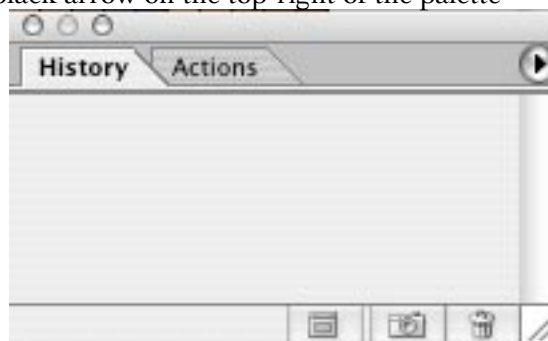
Toolbox:

The Toolbox (usually on the left of the window) contains over 40 tools that turn your mouse into the tool you choose by clicking on to it. Some tools have other related tools behind it to view and choose another tool from the fly-out menu. Click on the itty bitty arrowhead in the bottom-right corner of the tool icon. You can also choose a tool by using its keyboard shortcut (i.e. T for the text tool). You can see the shortcut in parenthesis when you move your mouse over a tool icon.

Options Bar:

The options bar is used to choose settings for each tool. The bar changes depending on which tool is selected (e.g the Brush tool). Use drop-down menus to adjust and customize the tool.

Navigating in the Photoshop workspace:

Zoom
The Zoom tool is used to zoom into an area.

Hold down the Option key while using the Zoom tool to zoom out.

Note: Command + / - is a very useful keyboard shortcut for zooming in and out of images.

Hand
Use the hand tool to navigate the viewing window of your image.
Note: the space bar on your keyboard when held down will temporarily turn any tool into the hand tool.

Screen Modes
You can choose how the Photoshop workspace looks by selecting a screen mode
   standard windowed mode   full screen w/ menu   full screen w/o menu
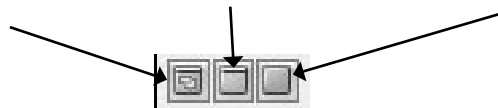
Hide/Show your Palettes
Sometimes Palettes can get in the way of working on an image. Use the Tab key on your keyboard to toggle the visibility of palettes on and off.

Downloading Web Images

You can download an image from any webpage on the Internet and open it in Photoshop. There are even useful search engines for finding images related to a specific topic or subject. The most popular search engines are Google (www.google.com -- cick on **Images**) and Ditto (www.ditto.com).

To download web images:

1. Navigate to the webpage that contains the image you want to download.

2. Right-click on the image (Ctrl + Click for Mac users: on a one-button mouse).

3. Select **Save Image As...** with the left mouse button.
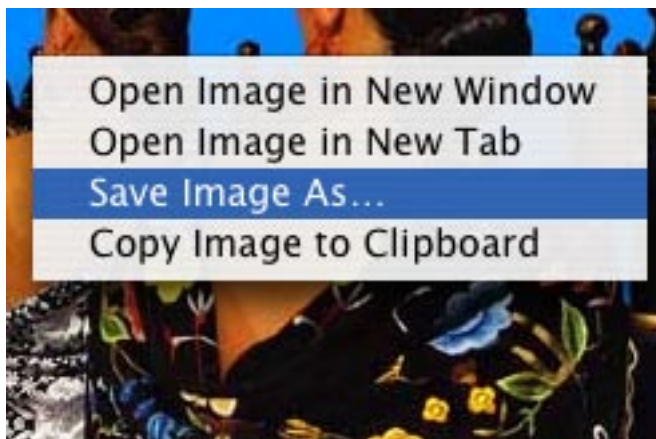
4. Navigate to your Documents folder and save (note the file name).

5. The image is ready to open in Photoshop. Launch Photoshop. Select File > Open.

About Copyright Laws:

Copyright and Fair use policies are complex and depend upon these 4 factors:

1. What is the character of the use?

2. What is the nature of the work to be used?

3. How much of the work will you use?

4. What effect would this use have on the market for the original or for permissions if the use were widespread?

For further information on Evergreen's approach, see http://www.evergreen.edu/dmca
Search for Creative Commons licensed content here, http://www.creativecommons.org

Resolution

Image Pixels:

1. Any image on a computer screen is composed of pixels. Pixels are squares of light that are fixed in size and do not overlap.

2. PPI (Pixels Per Inch) indicates the number of pixels per inch that compose an image on screen.
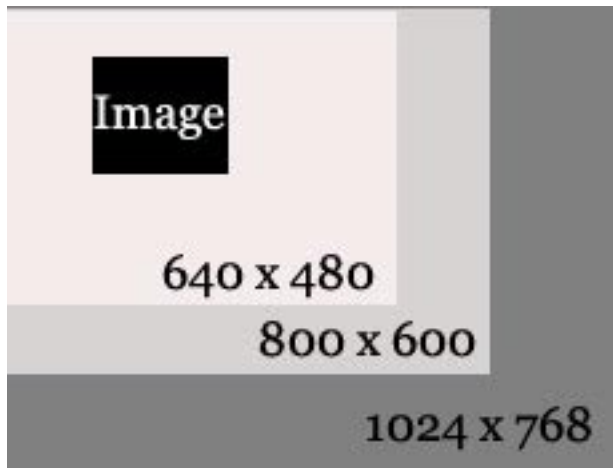
Monitor Resolution
1. Defines the number of pixels available to display images on a computer screen in width and height.

2. When Monitor Resolution increases, an image appears to shrink in relationship to the viewable area.

DPI and Print Resolution:

1. Printed images are composed of dots.

2. Dots are circles of ink on paper that may or may not be consistent in size and often overlap each other.

3. DPI (Dots Per Inch) indicate the number of dots per inch that compose an image on a physical surface (paper).

4. PPI and DPI are often misunderstood as being interchangeable. They are related but represent different visual effects. PPI determines an image's relative size on screen, while DPI determines image quality on the printed page. On screen, an image can be 72 PPI and still look good. Printed, an image requires more information.

Creating a New File for DV

An image can be created, opened, edited, and saved in over a dozen different file formats in Photoshop. Of this large selection, most likely you'll use only a handful on a regular basis. PSD is the native Photoshop file format and is the preferred format for creating a new file, especially if you are working with layers and want to make changes at a later time. Other formats include: JPG, GIF, TIFF, PDF, PNG.

To Create a New File:

1. Select **File > New**.

2. Enter a file name in the **Name** field.

3. The Custom **Preset** allows you to determine your own image size (which you can change later), but there are Preset image sizes like Letter and Legal or for specific uses like Digital Video

4. Choose NTSC DV 720 x 480 (with guides)

5. Click **OK**.

Once you start working on your new file, save as soon as possible as a .PSD (**P**hoto**S**hop **D**ocument).

Saving your work

As with most computer based work it is important to save your work frequently. If the computer crashes and you have not recently saved your work you may lose hours of creativity.

To save

1. **Go File > Save** (or Command-S)

2. Name your file (keep the 3 character extension, usually .psd)

3. Specify a location

4. Choose the appropriate file Format (usually Photoshop)

5. Click Save

If this is the first time you've saved you will need to specify a file name, location and file type. Generally you will want to be saving in the native Photoshop file format .psd.
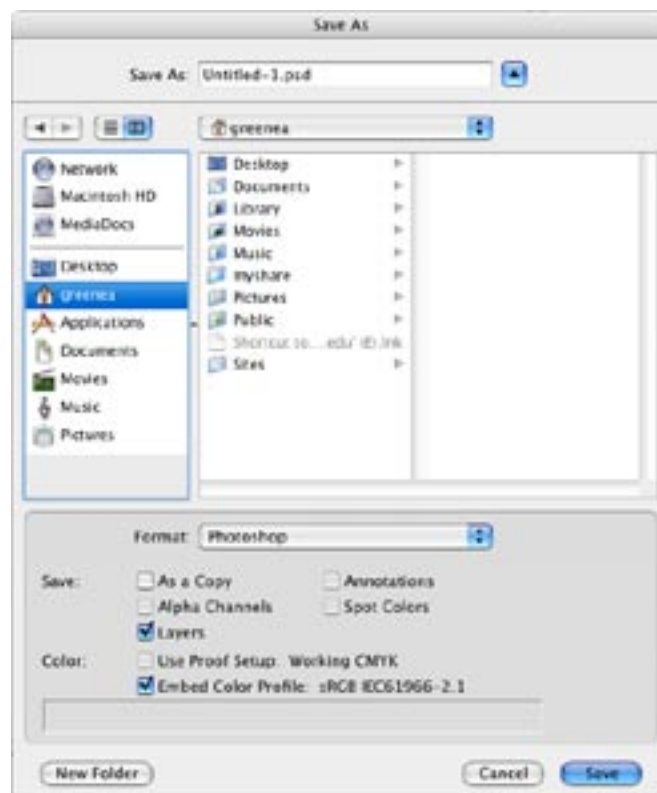
Working with the Canvas and Image Size

The canvas size determines the available document size for your image. It is usually determined when you create your document. If your canvas is smaller than your image, the image will be cropped. You can view and change both the canvas and image size of your document...

To view and/or change your image size

Image > Image Size displays the dimensions of your document.

By changing the width or height value in the Pixel Dimensions you can resize your image.

Alert: this will resize all layers in your document.
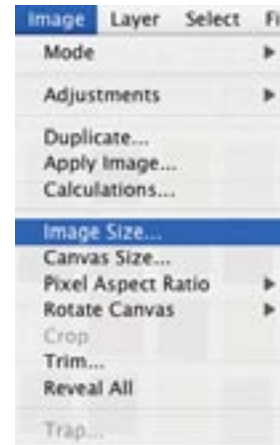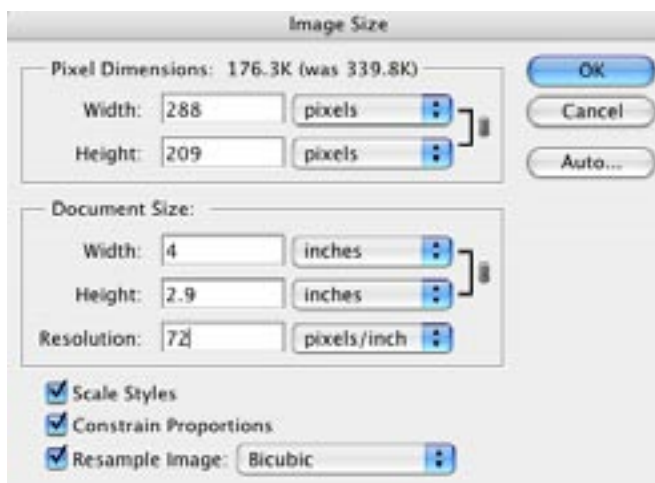
To view and/or change your canvas size

Image > Canvas Size enables you to increase or decrease the area in which your image resides. Setting the Anchor position orients the image relative to the new canvas size.

Image > Rotate Canvas allows you to change the orientation of your canvas. This will affect all layers in your document.
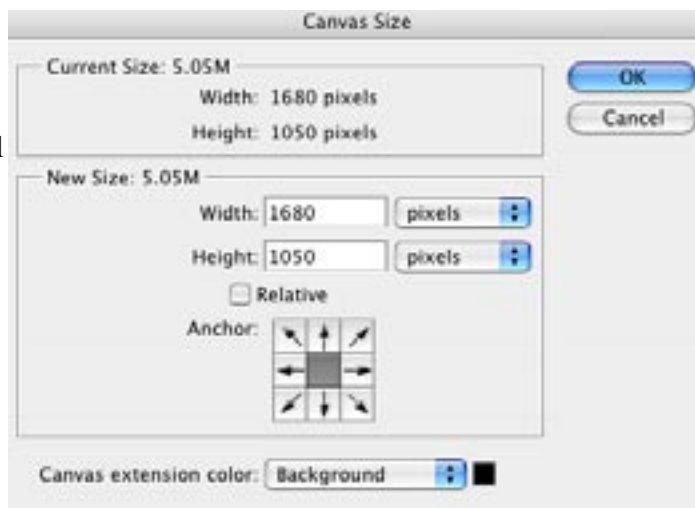
Layers

Layers enable you to work with individual components of your graphic images. They are accessible via the Layers palette (Window > Layers). There are four aspects of layers you can use to your advantage: active layer (which can be duplicated, moved, locked, etc.), its stacking order, its opacity, and its blending mode. They are sometimes described as sheets of acetate film or transparencies with the top layer being the most visible.

Select a layer
by clicking on its name. By Selecting a layer you are specify what you're going to be modifying

Layer Visibility - Hide/View
Click on the eyeball next to the layer name to 'hide' the layer. Click in the same area again to turn the eyeball back on and show the layer contents.

To work on the Background Layer
Duplicate it and work on a copy OR unlock it by double clicking on the layer and renaming it
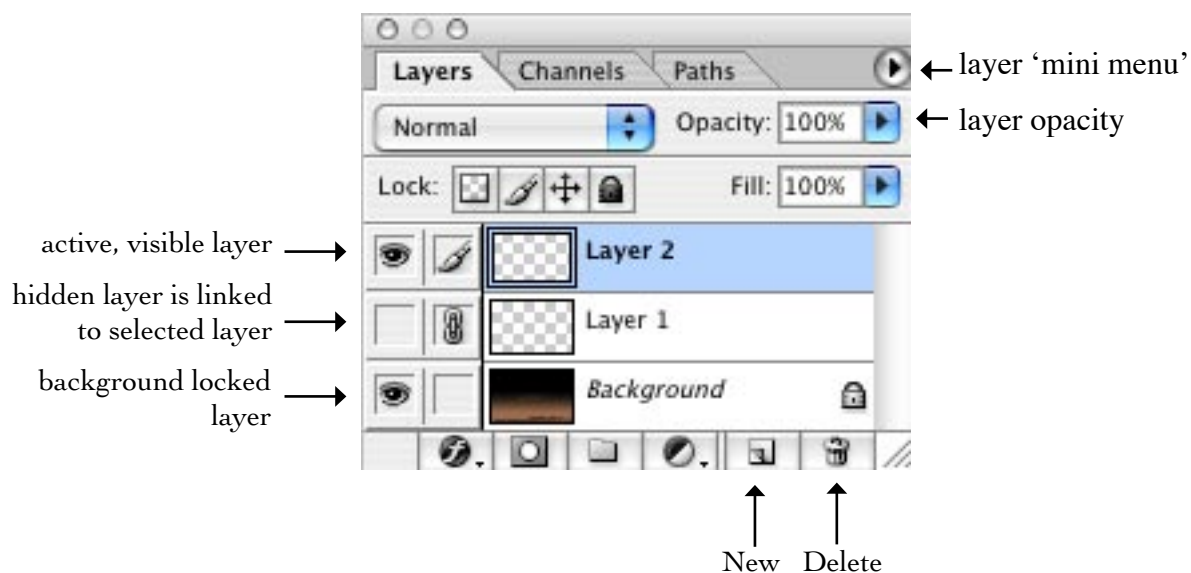
Duplicate a Layer
select Layer > Duplicate Layer with the layer to duplicate selected. Give the duplicate layer a new name.

To Add a New Empty Layer
select Layer > New Layer OR click the New Layer icon on the Layers pallet

Delete layers
by dragging the layer to the trash can in the Layers Palette

Change layer stacking order
select and drag a layer to its new position (top to bottom) in the Layers Palette

Modify layer opacity
using the slider in the Layers Palette

Link Layers
by clicking in the box next to the eyeball. A chain or link icon should appear and link this layer to the currently selected layer

Merge Down
merge two layers into one by selecting the layer above the one you'd like to merge and go Layer > Merge Down

Copy a Layer to Another Document
1. make sure both documents are open and visible

2. highlight the layer in the layers palett of the layer you'd like to copy

3. Click-hold-drag-and-drop that layer into the window of the document you'd like to copy the layer to

History

Everything you do in Photoshop is recorded in the History Palette.

If you want to undo an action several steps after the fact you can select the state you'd like to jump back to.

The number of steps you can undo depends on the history states setting. (In the Macintosh Classroom, the number of history states is set to 20.)
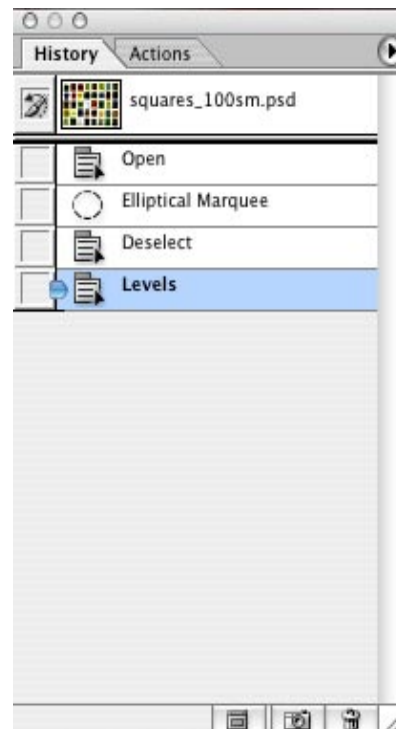
Creating a montage

You can combine multiple images into a single Photoshop document quickly and easily using drag and drop. First choose a file to become your background document. This will be the file you will be adding images to. You can also create a new file to become your background document at the resolution and image size you choose.

To add images to your background document

1. Open both your background document and the files you'd like to add to the background.

2. Move the document windows (by dragging the top bar of the window) so that you can see both windows with the background image behind the document your copying from (see below).

background document
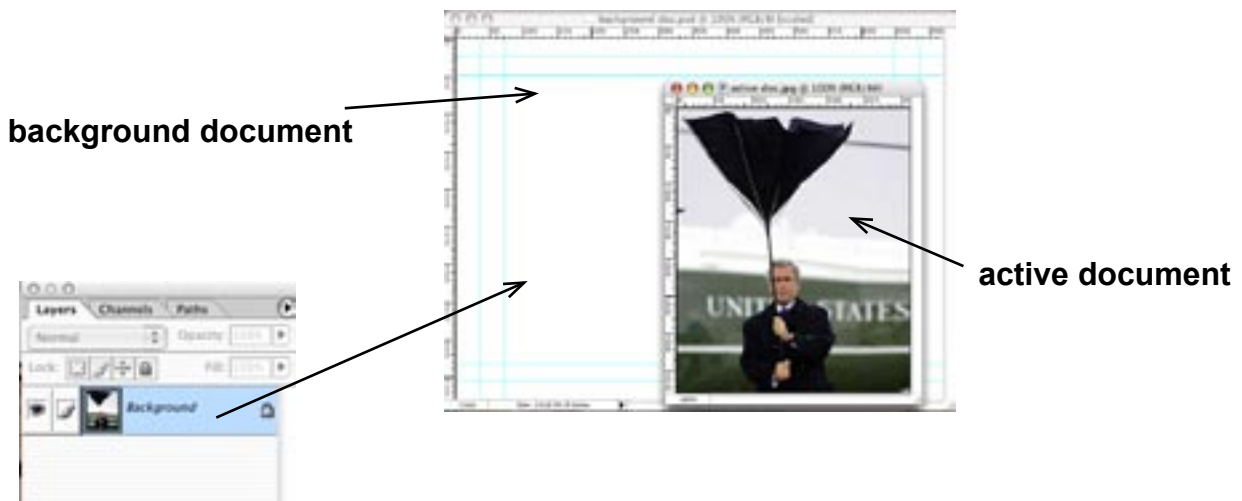
active document

3. Drag the background layer from the active document (the one on top) anywhere onto the canvas area of the background document.

4. A copy of the active documents background layer will now appear in the background document.

5. Repeat the above steps with as many images as you'd like.

ALERT: if your active document is a .gif file you will first need to change it's mode.

1. To change th mode of a .gif file go Image > Mode and select RGB

Resize and Rotate Layers

Often you'll want to resize, rotate or flip the contents of a layer.

To resize a layer:

1. Select **Edit > Free Transform or Cmd-T**

2. Grab a corner anchor and scale your image. Tip: hold down the shift key on your keyboard to retain the aspect ratio (width and height proportions).

3. Hit Return on your keyboard to apply the transform. (or hit the esc key to get out of trandform mode with resizing your layer).

To rotate a layer:

1. Select **Edit > Free Transform or Cmd-T**

2. Bring your cursor to a corner and until it turns into a curve

3. click hold and drag to spin your image

4. hit return on your keyboard to apply the rotation

To flip the contents of a layer:

1. Select **Edit > Transform > Flip Horizontal** (or Vertical)

Selecting Areas of the Image

There many instances when you need to change or delete on a portion of your image. Choosing the appropriate selection tool for your image depends on many factors. Understanding how each selection tool works will help you to choose the best tool for the job and work more effectively.

Selection Tools

The selection tools all work in slightly different ways to achieve the same purpose: to define an area to move, change, or manipulate. Once a selection is made, it can be copied, pasted, erased, painted, or given an number of effects. Areas not included in the selection will not be affected by any changes made to the selected area.

The Rectangular Marquee Tool

Makes rectangular selections (keyboard shortcut 'M')
Hold down the Shift key to constrain it to a square

The Elliptical Marquee Tool

is accessed as a fly-out menu from underneath Rectangular Marquee Tool and makes elliptical selections
Hold down the Shift key to constrain it to a circle

The Lasso Tool

is used to create irregular selections

The Magnetic Lasso tool

is accessed by holding down the Lasso Tool icon and is used to select an area with hard edges and high contrast backgrounds

Note: On selections with well-defined edges, try using a higher width and higher edge contrast. On selections with softer edges, try using a lower width and lower edge contrast. (Width and edge contrast can be entered in the Options palette.)

The Magic Wand tool

makes selections based on color values. Note the tolerance setting in the Options Palette. The following steps may be necessary to isolate an area:

1. Click in the background area to select the area around the figure. Shift click to add to the selected area. Change the Tolerance setting if the too many or too little of the pixels you want are being selected.

Selection Tips

Go **Select > Inverse** to reverse the selection.

To deselect an item choose **Select > Deselect** (or Cmd + D)

To add regions to your selection hold the shift key down and click

To subtracts area hold the option (or alt) key down and click

Try **Select > Modify > Expand or Contract** to uniformly shrink or grow a selection