Photoshop Part 2

Access

NYU Medical Center faculty, staff, and students have access to Photoshop software via the KeyServer. Go to http://keyserver.med.nyu.edu/ and follow the instructions for downloading “KeyAccess” and Photoshop. The “read me” file installed with the software contains the serial number you will need to complete the installation process.

Photoshop can also be purchased and installed using a CD.

Making a Selection

Being able to make a good selection and choosing the appropriate tool is one of the most important skills to learn. Photoshop allows you to edit a specific area of an image or layer of an image by selecting the area or layer you want to edit. The selected areas of an image can also be copied and pasted into an altogether new or different image.

There are several different tools that allow you to make a selection and work differently. To select the tool you want to use click the tool on the tool panel. Remember that tools with the small arrow in the bottom left of their square have other tools buried under them. Click and hold on those tools to see a flyout menu of the tools underneath.

Lasso Tool – Comes in three different varieties.

- Lasso tool – Freehand draw your selection area. Click and hold the left mouse button as you draw your selection area.
- Polygonal Lasso Tool – Draw your selection area by drawing straight lines from point to point of your choosing. Click the mouse button to define the points of your selection area.
- Magnetic Lasso Tool – Photoshop helps you make your selection by trying following the edge of the object you are trying to select. Click and hold the left mouse button as you draw around the edges of your selection.

Marquee Tool – Comes in four varieties, two of which are most useful (for general purposes). (The other Marquee Tools in Photoshop will function similarly to these.)

- Rectangular Marquee Tool – Makes a rectangular selection area. Click and hold the left mouse button as you draw your selection area.
- Elliptical Marquee Tool – Makes a circular or elliptical selection area. Click and hold the left mouse button as you draw your selection area.

NOTE: You can select perfect circles or squares by holding down the “Shift” key while drawing your selection.
Selecting a Color Range

The Color Range Tool allows you to select all parts of an image that are a certain color. Under the top menu choose “Select” → “Color Range” and choose an area of the image containing the color from the pop up dialog box.

Inverting your selection – Sometimes it is easier to select what you don’t want in an image (e.g. the white background of an image) and then inverting your selection to select everything else. To invert your selection from the menu bar choose “Select” → “Inverse”

Adding/Subtracting/De-selecting – You can also add or subtract from an existing selection to fine tune your area.
- Adding – Hold down the “Shift” key while drawing to add to the selection.
- Subtracting – Hold down the “Alt” key while drawing to subtract from an existing selection.
- De-selecting – From the menu bar choose “Select” → “Deselect” to remove any current selection.

Feathering

Adding a feather effect to your selection before you select will soften the edges. This can avoid a jagged look if you are copying and pasting into another image. The feather option for the tool will appear on the tool options bar.

Example:
Layers

Once you begin copying and pasting parts of images into each other, it is very important to keep track of which layer you are working on and the order of the layers. Always pay attention to the layer you have active in the layers panel as that is the only layer you are able to edit.

- **Naming layers** – It is useful to name the layers with something indicative of their contents. Double-click on the layer number to rename it.

- **Layer order** – The order in which layers are stacked affects the visibility of what is underneath them. To change layer order, simply click and drag a layer to a new position.

- **Layer Opacity** – You can make a particular layer more transparent by lowering its opacity. To change the opacity, click on the arrow in the Opacity box. An opacity scale bar will appear. Slide the arrow on the scale to the desired level of opacity. OR simply type the percent opacity you choose in the Opacity Box.

- **Layer Style** – You can add an effect (e.g. a drop shadow) to one specific layer by using the “Layer Effects” button on the bottom of the layers panel. To change the Layer Style, click on the Layer Effects button. Select an effect from the results effects menu. Adjust the effect using the Layer Style dialog box. Click OK when you have finished.

- **Transforming layers** – By selecting “Edit” → “Transform” from the menu bar you can rotate, scale or skew a specific layer. Simply select the desired transformation from the available menu.

Filters

Filters can add interesting “artistic” effects, sharpen, blur or distort an image. Remember you can select an area of an image to use the filter only on that part. The full range of filters can be found on the menu bar under “Filters.” Some Filters are applied automatically by selecting from the available menu. Other Filters will provide you with a dialog box with options to define or refine the filter effect.

Useful filters

- **Unsharp Mask** – Actually sharpens the image; Can be found under the “Sharpen” category of filters

- **Blur** – Blurs the image; Can soften rough edges

- **Despeckle** – Tries to remove specks in an image; Under “Noise” category of filters; You can use this repeatedly to increase the effect.

- **Lens flare** – Can add a “sparkle” to part of an image; Found under “Render” category

- **Lighting Effects** – Can add a “light source” to an image; Found under “Render” category
Other useful tools
To select the tool you want to use click the tool on the tool panel. Remember that tools with the small arrow in the bottom left of their square have other tools buried under them. Click and hold on those tools to see a flyout menu of the tools underneath.

- **Eraser Tool** - This tool can erase part of your layer, exposing the layers underneath. Can also be used to clean up the edges your pasted selection.

- **Clone Stamp Tool** - This is useful for painting over areas of an image with other areas of an image. First select the area of the image you want to paint with by holding down the “Alt” key and clicking. Release the “alt” key and begin painting over the area you want to cover.

- **Sponge Tool** - The sponge tool is used to desaturate color from an area. Use this on “red eye” in photographs to leech the color.

- **Color Replacement Tool** - Also useful in removing red eye. With the tool selected, click on the red part of the eye and that color will be replaced throughout by whatever you have set as the foreground color (black or gray would be best). (Photoshop CS only)

Quick and dirty photo correction
Photoshop can try to automatically adjust many things in a picture for you. Under the menu bar choose “Image” → “Adjustments” to see the auto levels, color and contrast. You can also manually adjust these by choosing the other options available from the menu. Also, be aware of the “Variations” options to walk step-by-step through color changes by clicking on the “more” of each color and seeing the changes. Remember you can select a particular area and make color changes only to that part of the image.

Overflash – To correct overflash, draw a feathered selection area around the area of the image that is “flashed out” then adjust the brightness and contrast sliders under “Image” → “Adjustments.”

Help
For additional assistance using Photoshop, click on “Help” in the top tool bar.

To read more about Photoshop:
1. Go to [http://library.med.nyu.edu](http://library.med.nyu.edu).
2. Go to the E-Resources section from the top navigation bar. Select “Biomedical Databases.”
3. Scroll down to “Books 24x7.” Click on the title to access “Books 24x7.”
4. Once you are in “Books 24x7,” search for Photoshop to retrieve relevant titles.

If you still have questions, try searching the Web for “Photoshop help” or contact Skirball Media Services at media_services@med.nyu.edu.