Adobe Photoshop CS3 Workshop

http://www.cla.purdue.edu/vpa/etb/
Fabian Winkler

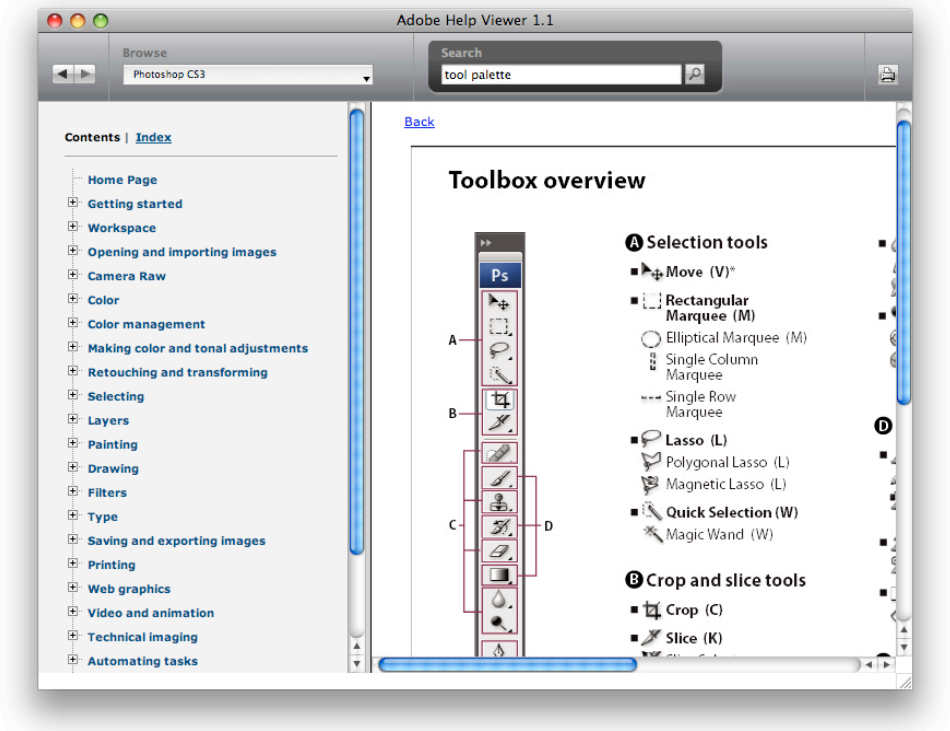
Required software/supplies for this workshop:

Description	
Adobe Creative Suite (incl. Photoshop CS3 or later) http://www.adobe.com	

Adobe Photoshop CS3 Workshop

Adobe Photoshop CS3

For all question related to Photoshop that we cannot address in class please consult the excellent Photoshop help:
`Help > Photoshop Help...`



Opening a file
Go to `File > Open` or drag the imagefile onto the Photoshop icon on your desktop or in your dock.

Our standard workspace in Photoshop and the names of its most important elements:

A. Menu bar **B.** Options bar **C.** Tools palette **D**. Document window **E.** Three palette (panel) groups in vertical dock with Layers palette at the bottom

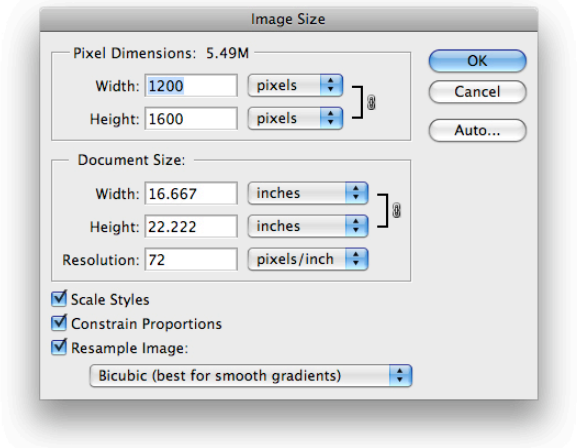
Viewing Size vs. Actual (Pixel) Size
Images can look identical if viewed at different viewing sizes when in fact they have quite different pixel sizes and consequently differences ion quality for print and online distribution.

Use "COMMAND + " to zoom in and "COMMAND – " to zoom out. When zoomed in use the SPACEBAR and mouse drag to pan in the image.
Both images on top of the following page have the same visual content (a street sign in San Diego) but they have different pixel sizes. It is not very obvious when we look at them side by side at 100% of their size (for the small image) and 25% (the big image)
See the pixel size of an image: `Image > Image Size …`

It only becomes more apparent when we zoom into both of them and look at them at 400% of their actual size (small image and 100% (large image). The smaller image (on the left) clearly appears pixilated.

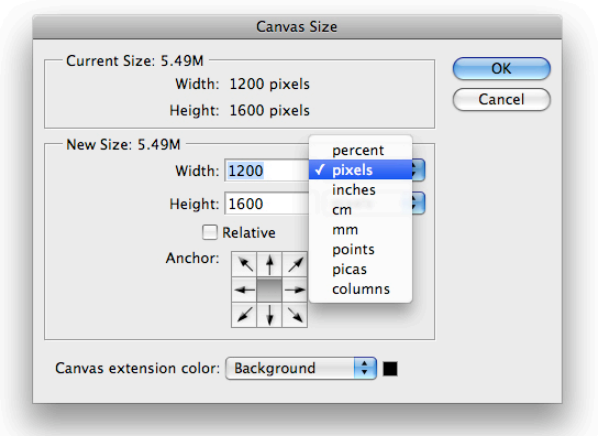
Scaling Images – Resolution, Pixel Size

The resolution of an image is important for processes that involve the digitizing of a printed image (scanning) or the printing of a digital image. In each case the resolution refers to the number/density of dots/pixels at which the surface area of the image is being scanned or printed. The higher the density of the pixels per given surface area (usually measured in square inches), the higher the image's resolution.
If you are only working with digital images and never intend to scan physical images or output your images on a printer, you can always work with a fixed resolution of 72 dpi. For printing output, as a rule of thumb, work at least with resolutions of 150 dpi or higher, the same goes for scanner import.
The pixel size of an image is its actual number of horizontal and vertical pixels.
There is a direct relationship between pixel size, resolution and physical image size (if you were to output the image to a printer). If the pixel size stays the same, the physical size of the image gets bigger when you decrease its resolution. The physical size of the image gets smaller when you increase its resolution (assuming the pixel size stays the same.
Go to `Image > Image Size …`



The current pixel size of this image is 1200 in the width and 1600 in the height. The print size (document size) is 16.6 inches by 22.2 inches if we were to print it at a resolution of 72 dpi (pixels per inch). If you uncheck the `Resample Image` option you can change the resolution without affecting the pixel dimension. You will see that the document size will change though.
If you leave the `Resample Image` option checked you can change the pixel size (e.g. to make your image smaller for web distribution etc.), which will also change the document size while keeping the current resolution.
Please read `Opening and importing images > Image size and resolution > About pixel dimensions and resolution` in the Photoshop Help for more information.

Manipulating Your Canvas Size
Sometimes you would like to enlarge the canvas area of your image without changing the size of your image (e.g. to create a panorama of multiple images next to each other).
Go to `Image > Canvas Size …`



Cropping

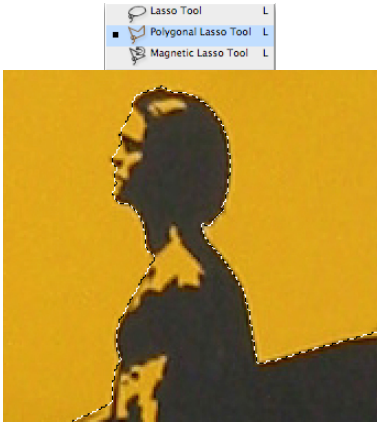
Sometimes you would like to crop the canvas size of your image (e.g. to get rid of unwanted image content). Although you can do this in the above `Canvas Size` window, too, you often want to this visually.

Select the `Rectangular Marquee Tool` from the tools palette and draw a selection around the area of the image that you would like to keep.

Then go to `Image > Crop`

Drawing selections

There are many different ways how you can draw a selection around an irregularly shaped visual element in your image. The most popular one is probably the `Polygonal Lasso Tool` which works by clicking around your shape, each click sets a point and points are connected by straight lines. For round shapes you will need to approximate round edges. Also be sure to zoom in at least to 200% into your document for greater precision.

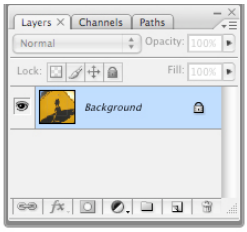


When you use the Edit > Copy command you can extract the selection and paste it on its own separate layer by using Edit > Paste (see working with layers in the next section of this tutorial)

One drawback of this method is that changing the selection after it has been completed is rather tedious (see Selecting > Deleting and extracting objects > Remove (cut) an object from a photo in the Photoshop help for details)

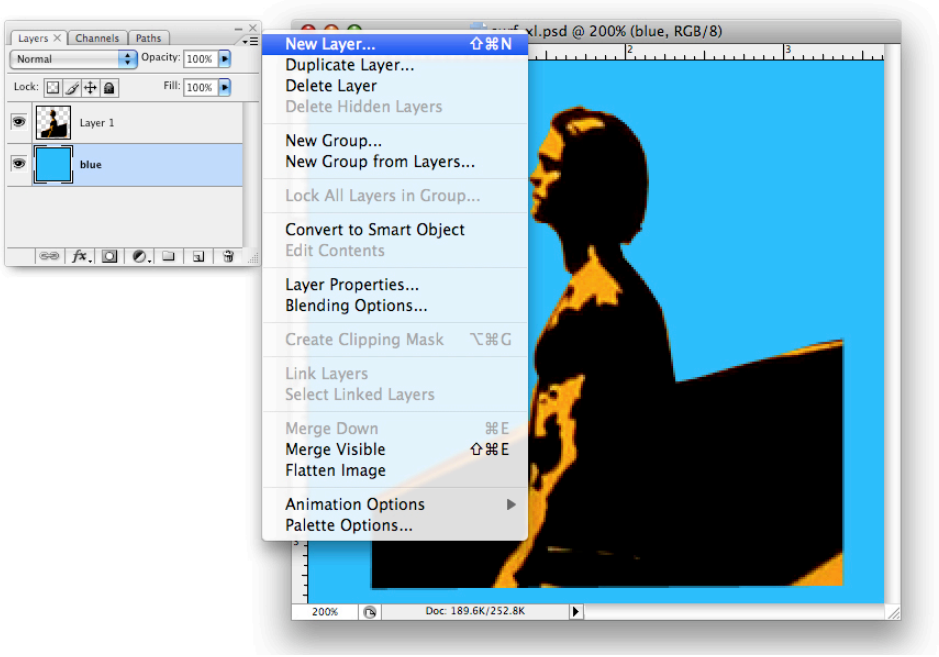
Working with Layers

The ability to work easily with multiple layers is one of the key features in Photoshop. It allows you to combine visual content from different images with the advantage to work on each visual element separately from the others. The central palette for working with layers is the Layers Palette.



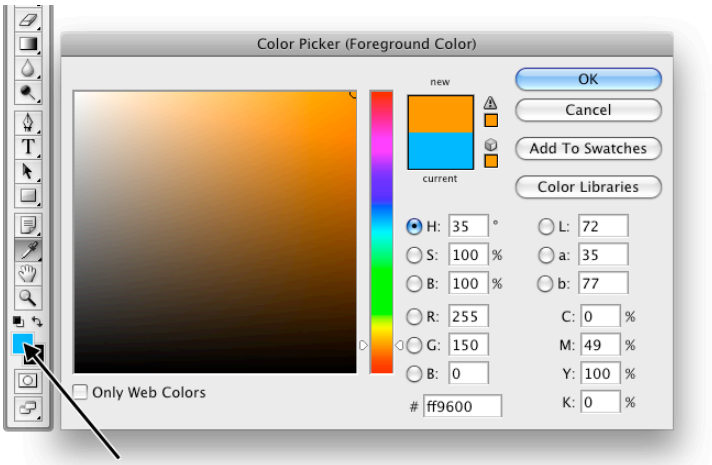
In the example above when you draw a selection, copy it and then paste it into a document, Photoshop will automatically create a new layer in the Layer Palette for you.

The layer that sits on top of the layer stack is the one that is visible the most. You can use blending modes and the opacity slider to change how layers interact with each other visually. Make sure to select the layer that you would like to change first by clicking on it and then apply the desired blending mode or transparency setting.
Click the eye icon on the left of a layers name to make it temporarily invisible and COMMAND double click a layers name to change it. You can select multiple layers at once by clicking on them with the COMMAND key held down. And you can retrieve a layer's outline as a selection by COMMAND clicking on the layer's icon.
You can access many helpful functions needed for working with layers (such as create new layer, delete layer, flatten layers, etc.) in a pull down menu that appears when you click on the layer tab on the right top corner of the Layers Palette.



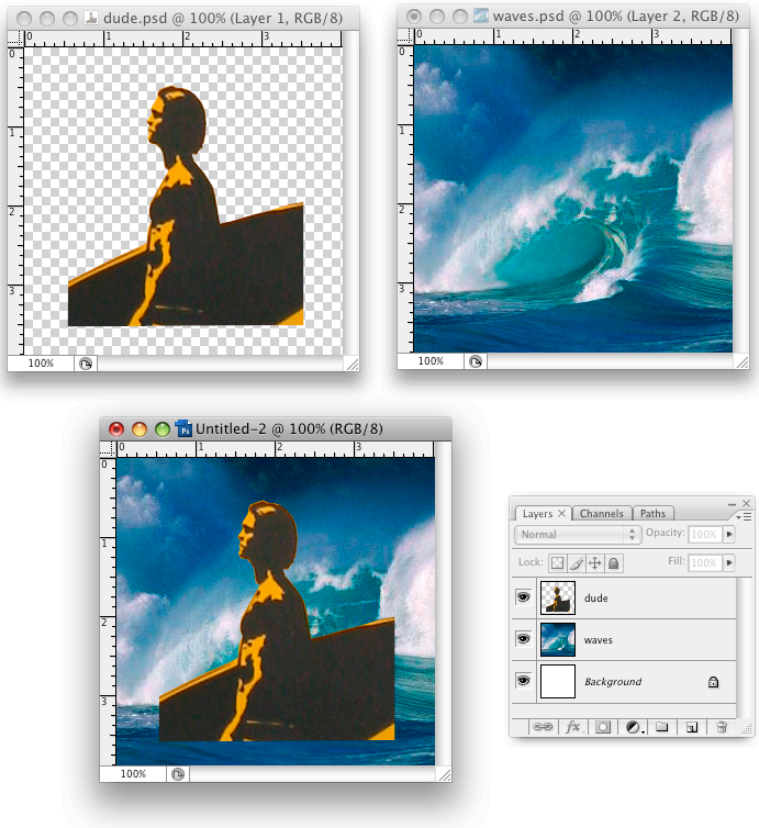
Selecting colors

You can select colors by clicking on the color swatches in the tool palette, the color swatch on the top is the foreground color and the color underneath it is the background color. Clicking on the arrow on the top right to the color swatches reverses this order. When you click on one of the color swatches, the color picker window opens. It allows you to select a color in your currently opened Photoshop document by clicking on it or by selecting it directly in the color field on the left hand side of the Color Picker window. Choose `Edit > Fill...` to fill a selected area or a whole layer with the color of your choice



Combining content from two different files in one file

Often you will be working with content from many different files that you would like to combine in one single file. Using layers, this is easy to do. In addition, layers will allow you to modify each separated element individually without touching visual content on any of the other layers. Simply select the visual element of your choice, copy it (COMMAND + C) and paste it into the final document (COMMAND + V), see below:



Flattening layers
You can keep all of your layers separated or merge some or all of them together to fewer or only one layer(s). Just click on the in a pull down menu in the right top corner of the `Layers Palette` and choose between `Merge Down` (merges top layer with the layer immediately underneath it), `Merge Visible` (merges all the visible layers, check the eye icons next to the layer icons) and `Flatten` (merges all the layers to one)

Saving your documents
Use the `File > Save As…` command and choose a project folder in a location that you can easily remember.

File formats
In the process of saving your files you have a choice of many different file formats, in the following list are some of the most common file formats with short explanations.
.PSD – save your files in the Photoshop file format if you do not want to apply any compression and if you would like to keep all the layers separated. This can result in a rather large file. Not many other programs are able to open this file format though.
.TIFF – save your files in the TIFF file format (Tagged Image File Format) for uncompressed quality and portability. Many print services accept TIFF files and the format is compatible with most image-editing software.
.JPEG – save your files in the JPEG format (Joint Photographic Experts Group) for high quality compressed images, almost any graphic software can open these files and they are often used in web pages. The file size is small but dependent on the quality setting the quality can suffer. JPEG works best for photos.
.GIF – use the GIF format (Graphics Interchange Format) for files with large areas of the same (or very similar) color(s) such as charts, cartoon style images, etc. Since the GIF file format allows a maximum of 256 colors it is not well suited for photos. You find GIF images frequently in web pages, too.

.PNG – Portable Network Graphic, an internet file format for compressed image files. The PNG file format is the successor of the slightly outdated GIF file format. More and more images on the WWW are in this format.

Please also see: `Saving and exporting images > File formats` in the Photoshop Help for more information