

**Workshops on Photoshop
By Interactive Measurement Group at
The University of Nevada, Las Vegas**

Please cite the following reference if you use or modify these materials:

Reference: Interactive Measurement Group (2007). *Workshops on Photoshop*. Available from <http://www.scsv.nevada.edu/~eigroup/img/>

Lesson 1: Creating Desktop Wallpaper

Purpose

In this workshop, you will learn how to make desktop wallpaper in Photoshop Creative Suite.

Prerequisites

No prerequisites are required to start this lesson.

Downloading Images

1. There are a series of stock photos on the cluster server – to use them, go to <http://files.nevada.edu>.
2. Download the folder named “Images”, located in Barchards Lab, Lab Meetings and Training, Workshop on Photoshop. Also, look at the example images entitled “Examples” in the workshop folder.

Opening a File

1. Open Adobe Photoshop Creative Suite through the start menu-click on the start menu, move the cursor over “programs”, scroll down to Microsoft office and double click on photoshop.
2. Go to File option in the top left corner and select new.
3. A dialogue box will appear once you do this.
 - a. Select a name for your project. I’m using “Psychology Wallpaper”.
 - b. Wallpapers look best at certain resolutions. 1024 x 820 is a fairly standard resolution, so we’ll set our width to 1024 pixels, and our height to 820 pixels. Because we’re formatting something for electronic viewing, we’ll use pixels. If you want to create an image to be printed at a certain size, you would change the dropdown menu to inches.
 - c. 600 pixels per inch is a fairly high resolution. Normally, 300 pixels per inch is good quality, and takes up less space. Change the resolution to 300.
 - d. Make sure you’re working in RGB mode, and that your background contents are set to transparent, and click OK.

The Main Toolbar

1. On the left hand side of the screen, you should see your main toolbar.
2. To see what each tool is called, move the mouse cursor over the icons, and a small text box will appear.
3. Underneath the main tools are your current foreground and background colors. The first box should be black, and is the foreground color. To change it, click it once, and a “Color Picker” window should appear.
4. The rainbow colored bar in the center is your hue selector. Click on the general color to change the tint/shade box to that color. For instance, if you click on green, slide the adjustment bar to the blue-green hue, then click in the large box next to the bar, and it will give you shades and hues of that color. Press okay when you find a color you like.

Working with Layers

1. Make sure you have a “Layers Window”. It is located on the lower right-hand side of the screen, and displays your current layers. If you can’t see it, go to “window”, and make sure the “layers” option is checked.
2. Select the paint bucket tool from the tool bar. If you can’t find it, look to the “gradient” tool, click and hold, and then select the paint bucket tool. (you can also go to edit/fill, or press SHIFT+F5)
3. To Fill a Layer with your background color:
 - a. Click your layer window, then on “layer 1”. Go to the bottom of the layer window, and click the icon next to the trashcan icon that says “Create a new layer”.
 - b. This can also be done by going to the “layer” menu option, then to “new”, and selecting “layer”.

- c. A new layer appears on the window. Let's rename it. Double click on the text that says Layer 2, and type in "Gridwork". If you don't click on the text, the layers properties will pop up. If this happens, just click cancel. Rename Layer 1 as "Base".
- d. Save your work in your home directory as "wallpaper.jpg"

Adding lines and shapes

1. Now we need to add lines to our base to section off areas for our pictures.
2. This can be done freehand – to get the line tool, click and hold the rectangle icon, and then select the line tool. You can also do this by clicking the rectangle icon once, then locating the line tool on the top of the screen, underneath the menu items.
3. We want to make our lines the right color – click the foreground color again, and this time, pick white, or a very light version of the color of your base. Click ok.
4. We want to be able to see our lines. Up under the menu, type in "5 px" in the box after "weight". If you want a thicker line, type in 7 or 8 px, and for a thinner, 2-3.
5. Starting around the left side of your image, half way down, click and drag a horizontal line to the other side, holding the shift button to keep the line straight.
6. Duplicating a line repeatedly:
 - a. From the tool bar, click the arrow icon that says "move tool"
 - b. Hold down the ALT key, and click and drag your line.
 - c. This copies the line, without moving the original
 - d. You'll have noticed that when you copy your line, they each appear on their own layer, and that you must click on the layer before you can move it.
 - e. Add more lines, spacing them out roughly by eye, and creating 4-6 horizontal divisions.
7. Alignment and more layers
 - a. Go to the layers window, and press shift and then click on the bottom of the layers with lines. This selects all of the layers that have lines on them.
 - b. Underneath the menu, there are a few alignment options. Pick the one that says, "distribute vertical centers", and presto! It lines them up. If it's shifted to one side or the other, click on one line and since it's still selected, ALL lines should move together.
 - c. While you have these layers selected, go to the layer menu, and select "merge layers". Make sure you don't merge the base layer – if you do, undo, and just shift select the line layers. This merges all of your lines down to one convenient layer.
 - d. Repeat this process for 5-7 vertical lines, only this time select "ALIGN vertical centers" – if you try otherwise, they'll all just lump in the center.
 - e. Merge all of your line layers to the "gridwork" layer. At this point, you should only have the "gridwork" and "base" layers. Photoshop may have renamed your line layer – as long as it's a separate layer from your base, it's okay – rename it grid work again.
 - f. Your image should look somewhat like a checker-board. If not, go back and make it look more like a checker-board.

Text

You will now learn how to add text to what you have already created.

1. For simplicity, we'll just type the word "PSI".
2. To make a text box, click on the large "T" text icon.
3. Click and drag a large text box on the middle of your image (You can always change the size of your text box if you find it's too big or too small for your text). This creates a new text layer. "PSI" Near the top, change the font size, type, and color. When you're ready to move the character to the right place, click on the "move" icon again, and drag the box to the appropriate place.
4. To add a shadow, double click the text layer on the layer window.
 - a. When the box comes up, select "Drop shadow" and "Outer Glow" on the left.
 - b. Play with some of the options – click again to deselect, if you don't like them. Click ok.

5. Create a new text box by clicking on the large “T” text icon. Click and drag a medium sized text box near the upper left-hand corner of your image from left to right.
6. Type the following words in whatever order you want “psychology humanity mind thought action psyche theory” (feel free to add whatever pertinent psychological lingo you want). Change the font size, type, and color (it’s a good idea to change the text color to something a little darker than your base color).
7. Center the text in between the top two horizontal lines. Try to make it so the line of text is shorter than the width of the entire image, but so the line of text is no more than one line (you can do this by stretching the text box further to the right or left).
8. Right click on your text’s layer in the layer menu and select “Blending options”. Select Bevel and Emboss from the left menu. In the middle of the box you should see under the “Advanced Blending” menu the “Fill Opacity” gauge. Lower the fill opacity to somewhere around 30-50%, or whatever looks transparent but readable. (You can play with the opacity further under the “General Blending” menu just above the “Advanced Blending” menu).
9. Click on the “Move” tool. Press and hold the “ALT” key and click the line of text you just created (Just like when we duplicated the grid lines). Move the new line of text just to the right of the previous (it should run off the edge of your image...that’s what you want). Continue this process in between each horizontal gridline until you have a cool marquee effect all the way down you image.
10. You should have a bunch of layers of the same text. Let’s merge them into one layer.
 - a. Go to the layers window, and press shift and then click on the bottom of the layers with the new text. This selects all of the layers that have the line of text on them (careful not to select the PSI symbol).
 - b. Go ahead and distribute vertical centers like last time.
 - c. While you have these layers selected, go to the layer menu, and select “merge layers”. Make sure you don’t merge with any layers other than the text.
11. Select the layer containing the PSI symbol. Click the Layer drop-down menu. Select “Arrange,” then select “Bring to Front.” (You can also do this by right clicking on the PSI image).
12. Save your work.

Lesson 2: Completing Wallpaper and Preparing it for The Internet

Purpose

In this workshop, you will learn how to add and resize pictures for desktop wallpaper, fine tune your wallpaper, and get it ready to put on the internet.

Prerequisites

You should have successfully completed Lesson 1: Creating Desktop Wallpaper, before attempting this lesson.

Pictures and Resizing

1. Open the Photoshop file you saved in your home directory last week.
2. Now we want to add pictures of our favorite psychologists to some of the squares. To do it without distorting the image, we need to make use of the crop tool.
3. Go to the “file” menu, and select open. Choose the image titled “Freud”, and it will open in a new window. Its dimensions are 294 x 400 pixels – but your boxes are much smaller than that (mine, for instance, is 210 x 169).
4. To figure out the size of your grid boxes, select the “rectangular marquee” tool at the top of the toolbar. Click on the top left corner of your box, and drag down to your lower right corner. Press “ctrl – c” to copy the selection, and “ctrl – n” to see the dimensions of your box.
5. With this new window in front, go to the menu “image”, and “image size”. This will give you the dimensions of your box.
6. Go back to your Freud image, and go to “image size” again. Change the width of this picture to match that of your box.
7. Freud’s still a bit too big, so now we’ll get creative. Go back to the wallpaper image. Make sure the box is still surrounded by the rectangular marquee (if not, click the tool again, and select the box’s area). Arrange your window so that you can see both your highlighted box, and part of the Freud image’s window. When in the selection, the marquee tool changes to a move tool, so drag the marquee to the Freud image window. You must be able to see part of the image for this to work.
8. On the Freud window, move the marquee until it frames the portion of the picture you’d like to use. Press “ctrl – c” to copy the selection, move back to your wallpaper window, and press “ctrl – v” to paste the image.
9. Use the “move” tool and place the image where you’d like it. Images paste on a new layer, so remember to click the layer you’d like to work on before trying to move it.
10. Repeat this process by opening another image, and starting with step e; pick about 4 more images.

Opacity

1. Once you have arranged your images on the wallpaper, make them more transparent. Some images are too dark, while others are fairly light; so we’ll do this layer by layer.
2. First, select the layer you want to work with. On the layers window, there is a small box with a drop down option near the top that says “Opacity”, followed by a percentage.
3. Change the opacity by typing in a new percent, or by clicking the small box beside it and sliding the bar until the box displays the correct percentage. 45% - 65% is about the range you’d like to fade the images – this conveniently let’s the color of your background bleed through the image, so you don’t have to go through more steps to match colors.
4. Change the opacity of your layers so that they are all slightly translucent.

Arranging layers and merging

11. To get the best out of Photoshop’s effects, you need to make sure your layers are arranged properly.
12. Your top layer should be the text, followed by your grid work, then images, and finally your base color.

13. If this isn't the case, click on the layer you'd like to move in the layers window. Drag it to the location in the window that you'd like, and drop it.
14. After you're finally happy with the layout of the images, merge them to the base.
 - a. Shift-click the layers in the layer window that have the images (not the text, grids, or base).
 - b. Go to the "layers" menu, then to "merge down"

Finishing Touches

1. The grid work lines are a bit sharp when compared to the rest of the image – we'll need to blur them.
2. Select the grid work layer on the layers window
 - a. Go to the "filter" menu, then "blur", then to "Gaussian blur".
 - b. Go to about 1.5 pixels or, if you have the "preview" box checked, move the slider slightly to see what looks best.
 - c. Click okay once you find a level of blur that looks good.
3. If preferred, double click the grid layer in the layers window, and select the "bevel and emboss" options in the pop up window.
4. When finished, go to the "layers" menu, and select "flatten image". Then go to "file" and save the file as a jpeg.

Preparing Images For The Web and Batch Resizing

Images need to be resized in order to load and transfer quickly on the internet. If an image is too large it will be slow to load when someone views it on the internet. If it's too slow then many people won't bother letting it load and will simply leave your page. Now image sizes (both file size and image pixel size) will vary but if you keep your images around 100KB or less and/or 800 pixels on the long side then you should be ok in most instances. Also of interest is the resolution of the image in terms of ppi (pixels per inch). For a web image you can just use 72ppi as anything higher in resolution isn't typically noticeable when viewed at web image sizes. There are two ways to make images web ready. One way is the manual ways of doing things (when you only have a few photos) and the other is an automatic batch resize (when you have many pictures). Let's start with the manual resizing

1. Open the file in Photoshop
2. With the image open go to the top and choose Image / Image Size this will bring up a new small window where you can change the image attributes.
3. This is where you'll change the pixel size and resolution of the image.
4. The top part labeled "pixel dimensions" is where you will enter how large, in pixels you want to make the image. If you don't see the word pixels to the right of the number then select the drop down menu and choose pixel, the only other option is percent. Don't change anything here yet, we'll come back to this but first we must change the resolution in the "document size" part of this window.
5. In the "document size" leave everything alone except the resolution, change it to 72 pixels/inch. Now we can go back up to the "pixel dimensions"
6. Under "pixel dimension enter in 800 under which dimension is larger (width or height), you'll see that the other dimension automatically changes.
7. Make sure the tick boxes for Scale Styles and Constrain Proportions are both checked and resample image is set to bicubic and then hit OK.
8. You'll see that the image is now smaller, let's save it.
9. Go to File / Save As. Choose a location and file name (desktop and image1.jpg). If your files is in another format other than JPEG then chose JPEG from the drop down menu below the file name for format. Click Save
10. the window for JPEG Options now comes up. Under Image Option is the word Quality with a box that has a number in it. Change that number to 5 and make sure the "format options" radio button is on Baseline ("Standard") and then click ok.
11. There you go! You've successfully resized a photo. If you only have a few photos this method is fine, but if you have many then batch processing is much faster. To do that look below

Batch Processing

1. Open Photoshop.
2. Click on File / Scripts / Image Processor.
3. This will bring up the Image Processor window where you'll choose what, where, and how you want your images treated.
4. First you must choose what images you wanted resized, the image processor will do an entire folder so it's best to only have the pictures you want resized in the folder you choose. Click on select folder and choose this folder.
5. Below that you must choose the destination folder, for this workshop just choose "save in same location". Keep in mind however that this will overwrite you current pictures so only do this if you know you won't want the full sized images anymore.
6. Next you must choose file type. Check on the box for "save as JPEG".
7. To the right of "save as JPGE" is "resize to fit", check that box as well and then fill in 800 for both width (W:) and height (H:). Doing this will ensure that images that are either portrait or landscape will be resized with the longest side at 800 pixels.
8. Don't worry about Convert Profile to sRGB, but make sure the neither "save as PSD" or "save as TIFF" are selected.
9. If this is a batch resizing that you often do then click on the 'save' button to the right so you don't have to fill all this in next time, if not then just hit Run.
10. You'll see the pictures quickly open then resize then close. Depending on how fast your computer is and how many images you have this could take a few seconds or a few minutes. Once the windows stop popping up on the screen then your batch process is done, congrats.

Lesson 3: Editing Photos

Purpose

In this workshop, you will learn how to edit a Lab Member's photo. This includes appropriately resizing the photo and adding a name tag.

Prerequisites

You should have successfully completed Lesson 1: Creating Desktop Wallpaper and Lesson 2: Completing Wallpaper and Preparing it for The Internet, before attempting this lesson.

Editing Photos

1. Begin by opening up the "Images". This folder can be found by opening BarchardsLab / Lab Meetings and Training / Workshops on Photoshop 1 / Images
2. Right click on your favorite photo, select "Open With", and select "Adobe Photoshop CS2".
3. Your selected photo should now be open with Photoshop.
4. On your Layers Window, right click the "Background" layer and select "Duplicate Layer". Name the new layer as you see fit and hit "OK". Once this is done delete the entire background. Make sure the "Background" layer is selected on the Layers Window and highlight the "Rectangular Marquee Tool" on the top left corner of the Tools Toolbar. Then hit the "delete" button on your keyboard.
5. To appropriately resize your photo, select the Duplicated Layer you made. On the toolbar located on the top of the page, select "Image" and then "Image Size". This should open up a new window with a listing of different dimensions. Change the dimensions as following:
 - a. For Pixel Dimensions:
 1. Width: 450 pixels
 2. Height 675 pixels
 - b. For Document Size:
 1. Width: 1.5 inches
 2. Height: 2.25 inches
 3. Resolution: 300 pixels/inch
 - c. Make sure "Constrain Proportions" is deselected.
6. To add a name tag, begin by creating a new layer. To do this select "Layer" on the toolbar located on the top of the page, select "New", and select "Layer". Appropriately name your new layer.
7. Once again select the "Rectangular Marquee Tool". On the bottom of your image draw out a square that is both big enough to fit readable text, but small enough not to take up too much of the image. Now select the "Paint Bucket Tool" on the Tools Toolbar and fill in your drawn out square with white paint. This should give you a good tag space to add a name.
8. To add a name, simply select the "Horizontal Type Tool" on the Tools Toolbar and type out an appropriate name using black ink. A good font size would be around 12pt-14pt. Make sure to move the text box over the white tag you made to make an appealing name tag.