

Overview

The purpose of this workshop is to demonstrate basic concepts of Photoshop and provide practice opportunities for beginning users. The student will be able to add, rename, delete, create new, and reorder layers; use the text tool, paint brush, eraser, and paint bucket with basic options; use the rectangular marquee for selection; use auto levels and rotate to correct scanned images; save .psd file and save for web.

Keyboard Shortcuts

- SAVE File > Save, or CTRL + S (DO THIS OFTEN!)
- UNDO Edit > Undo, or CTRL + Z
- Paint Bucket: G
- Paint Brush: B
- Eraser: E
- Marquee: M
- Zoom : Z
- Switch foreground/background color X
- Crop - C
- Remember to click the checkmark when you are done with the text, transform, and crop tools!

Materials

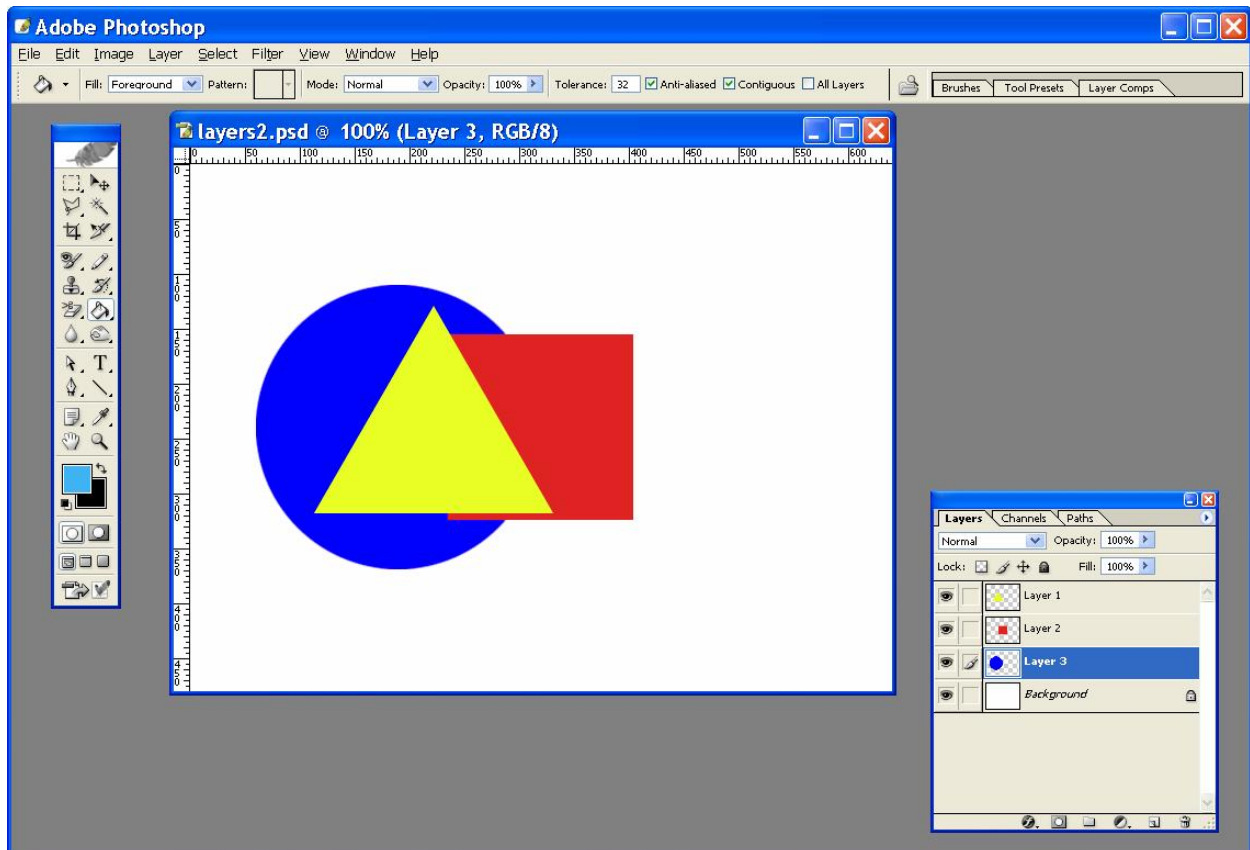
- Student handout
- layers.psd
This file matches the transparencies. Save this to the desktop.
- scan.psd
This file represents a typical scanned picture. It should be slightly discolored and crooked, 150 ppi. Save this to the desktop.

Getting Started with Layers

- When you think about layers, remember that
 1. each is a separate image, but together they form one image
 2. you can change one without changing the other
 3. you can change the order of the pages
 4. you can show and hide each page

- 5. each has transparent and opaque parts

Photoshop workspace



- Double-click on the file “Layers.psd” to open it.
- The first workspace concept to discuss is palettes. A palette is a window that displays information about the document. In this case we want to look for the window that displays information about the layers in our image, the Layers palette. (If you don’t see the Layers palette, you can show it by selecting Window > Layers from the menu or pressing F7.)

Layers palette

- Preview thumbnails
- Select layers
- Rename layers
- Reorder layers
- Show/hide layers
- Set Transparency (opacity)
- Delete layers
- Create new layers

Select a layer

- In the Layers palette, click once on “Layer 3”. The selected layer’s background color turns blue.

Rename layers

- Double-click on the layer name “Layer 3” for the circle layer. Type “circle” in the text field and press Enter when you’re done.
- Do the same to rename the the triangle and the square layers.

Reorder layers

- Click on the square layer to select it.
- Drag the layer above the triangle. Now the square will cover the triangle.

Change the layer transparency

- Select the “square” layer
- In the Opacity field near the top of the layers palette, change 100% to 50% and hit Enter. Now you should be able to see through the square to the triangle..
- Change the value back to 100% and press Enter.

Show or hide layers

- Click on the eye symbol next to the square layer. When the symbol disappears, the layer will not show in the document.

Click on the empty space again to show the square layer. You may hide and show as many layers as you wish.

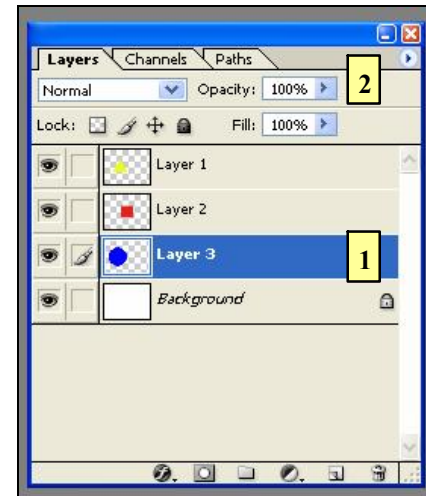


Figure 1 Layers Palette. 1) Selected layer, 2) Opacity settings

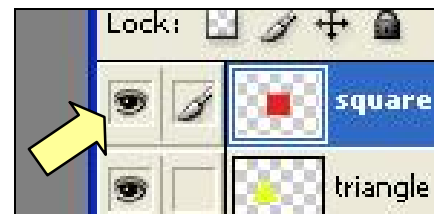


Figure 2 Layer visibility icon in the Layers palette.

Delete a layer

- Select the square layer.
- At the bottom of the Layers palette, click on the delete layer button.(see item E in Figure 3.) It looks like a trash bin
- Click “Yes” to delete the layer.

Create a new layer

- Click on the New Layer button (see item D in Figure 3.) Photoshop creates a new empty layer named “Layer 1” in the document.
- Reorder this new layer so that it is above the “circle” and “triangle” layers.

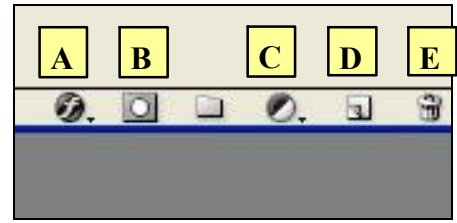


Figure 3 Buttons at the bottom of the Layers palette. A) Layer styles, B) Layer mask, C) Adjustment layers, D) New layer, E) Delete layer

Get Started, Tools

Tools are used to manipulate the individual layers.

Editing with the toolbox

- We want to make the square white and the circle black.
- First, make sure the layer you want to change is selected. We're going to make the circle black first, so select that layer. Remember to single-click!
- Take a look for the toolbox. Select the paint bucket
- from the toolbox. The paint bucket works very well for 'filling' an area with a color. The area must be all the same color for the paint bucket to work. To use the paint bucket, single-click inside the circle. The circle should be black. Also, check the layer preview thumbnail to see how that changed. *Hint* Edit-Undo if you make a mistake!*
- **SAVE YOUR WORK!** The .psd format saves all layers, save early and often, etc.
- Now we want to create a white square, but we deleted the square layer. Select the new layer we created before.
- If we used the paint bucket now, what would happen? It would make the entire layer white, so we need to select an area of the layer to work with. A selection restricts any changes to that selected area.
- Choose the rectangle marquee tool from the toolbox. To use the rectangle marquee tool, you click and drag across the image to make a selected area. The 'marching ants' show you the selected area.
- Now, choose the paint bucket tool and click inside the selected area. What happens? That's right, it should be black, which is the wrong color.
- At the bottom of the toolbox is the foreground/background color. To alternate between foreground and background, click the arrow next to the boxes.
- Now, click inside the selected area. What happens? If nothing is the answer, are you sure? Look at the thumbnail previews, and show/hide the background layer. Remember that you are seeing the combination of many layers. It should look like there isn't anything there, because the background of the image is also white.
- Let's change the color of the background, so that we can see our circle.

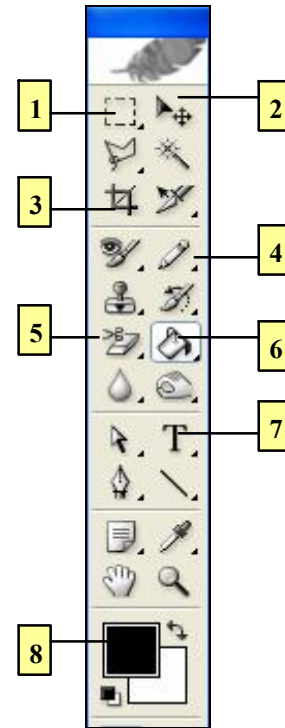


Figure 4 1) RectangularMarquee / Elliptical Marquee, 2) Move, 3) Crop, 4) Paintbrush / Pencil, 5) Eraser, 6) Paintbucket / Gradient 7) Text, 8) Color foreground

Get Started, Color picker, tools

- First we need to choose a new foreground color. To do so:
 - click once on the foreground color. This brings up the **color picker**.
 - The color picker lets you choose colors in 3 ways:
 - 1-Brightness – inside the box, clicking at the top of the box gives you brighter colors
 - 2 -Saturation – inside the box, clicking at the right of the box gives you more saturated colors (redder reds, greener greens)
 - 3 – Hue – clicking anywhere on the rainbow-colored bar to the right of the box gives you a new hue. Hue is the pure-spectrum color, and is how we usually describe colors (Red, green, blue, etc.)
 - Choose a new color! Click OK to make that color your foreground color.
 - Make sure the circle layer is still selected, choose the paint bucket and click inside the circle. You should now see your circle!
 - *SAVE YOUR WORK!*

More Tools, Zooming

You will probably want to do more with an image than just

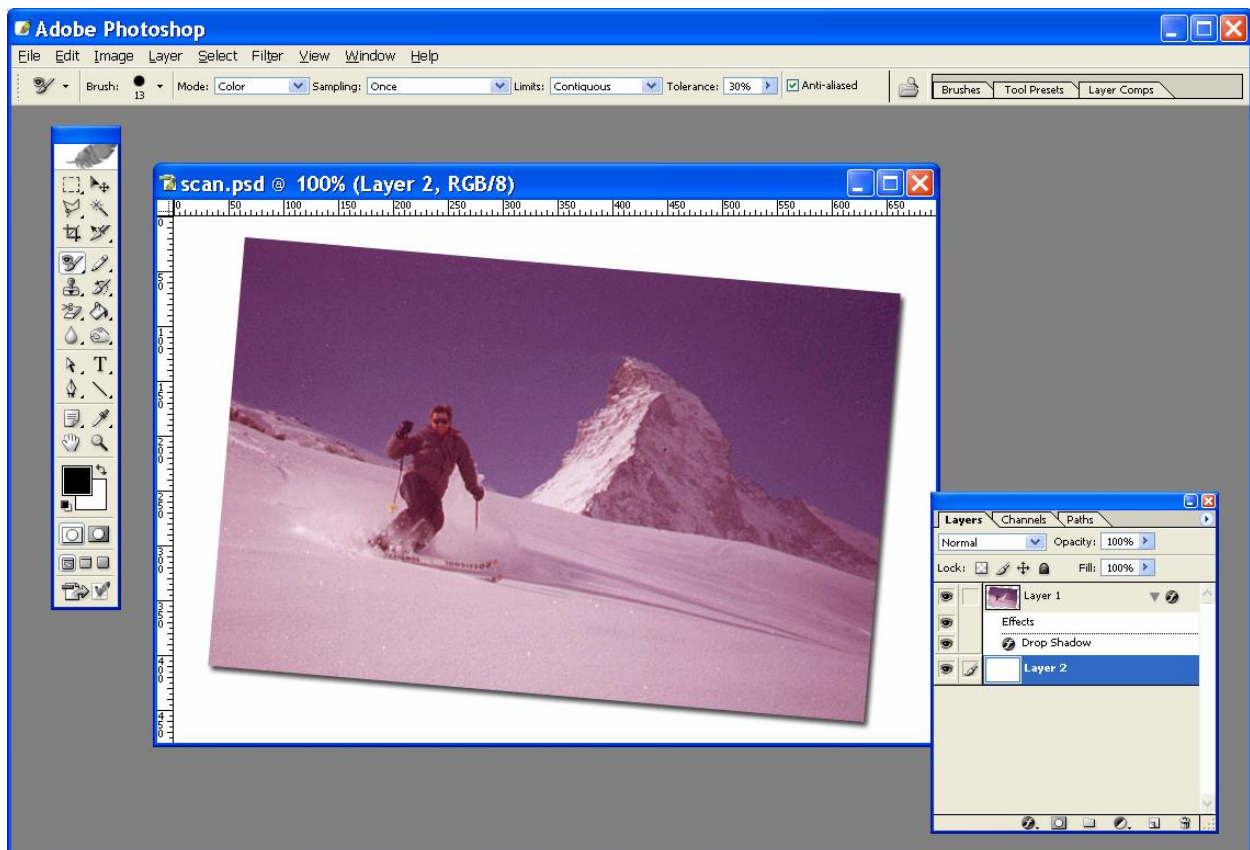
- **text**
 - **paint brush**
 - **eraser**
 - **move tool**
-
- We're going to use the paint brush to change our image. There are many options to consider when using a paint brush, but we'll concentrate on the basics:
 - Master Diameter (size of the brush)
 - Hardness (how defined the edge of the brush is)
 - Choose the paint brush, and select a diameter of 20 px and a hardness of 100 %
 - Select the square layer, and draw a line across the layer, but **DON'T GO OVER THE SQUARE!** We'll need that soon!
 - Now change the hardness to 50% and draw a new line to to the previous one.
 - Let's have a little fun with this: We're going to make some symbols to confuse anthropologists in 1000 years. Let's draw little symbols inside our shapes...the point is to make something a little cryptic.
 - First, we want to get rid of those lines we made. The easiest way is to use the eraser. Select the eraser from the toolbox. In the options, under mode, choose "block".
 - To use the eraser, click and drag over the lines.
 - Some of the layers are in the way...to move layers around we use the Move tool. Select the Move tool from the toolbox and use it to arrange your square, circle, and triangle so that they don't overlap (unless you want them to!).
 - To work in detail, we need to do two things.
 - **Zoom in!** To do so, click on the Zoom tool in the toolbox. To zoom in, click on the area you want to zoom in to. To zoom out, hold ALT and click on the image. Be patient, it takes a moment for the computer to redraw the image on the screen.

- Select a smaller diameter to work in detail (try 3px).
- Draw away! Make sure you select the layer you want to draw on!
- *SAVE YOUR WORK!*

Text

- Everyone should have cryptic-looking symbols by now. So that future scientists are further confused, we should label them using the Text tool.
- Select the text tool from the toolbox. Select “Papyrus”, 14 Point text.
- To begin typing, SINGLE-CLICK above the first symbol. Do not click and drag! Notice that other tools are now greyed out- there isn't much you can do while the text tool is active! Type the name of your symbol and click the Checkmark in the options bar to save your changes.
- Notice that a new layer is created, the name is the same as what you typed. This lets you go back and edit that text. To do so, double-click on the preview thumbnail.
- The text color is the foreground color. To change the text color, double-click on the preview icon and click on the color swatch in the options bar- this gives you the color picker.
- Use the Move tool to rearrange your text.
- Use the Text tool to label the other symbols.
- *SAVE YOUR WORK!*

Working with scanned images



- File > Open > Desktop, “scan.psd”
- This is a typical scanned image; a little crooked, a little off-color. We'll fix both.
- First, we want to rotate the image to fix the angle. To do so:
 - Edit > Transform > Rotate
 - This creates a 'bounding box' around the image. The boxes on the sides and corners indicate it is a bounding box.
 - To rotate the image, type in a + or – angle number in the Rotate entry box, and hit enter. You can do this as many times as you wish.
 - Click the checkmark to finalize the changes.
- Next we want to crop the image. The crop tool cuts out pieces of the image you don't want.
 - Choose the Crop tool from the toolbox.
 - Selecting a crop area works similar to the marquee tool – you click and drag a box out. There is a difference though; once you create the box you can change the size by clicking and dragging the corners of the box.
 - Click and drag a large box over the area you want to keep. Remember that it doesn't have to be perfect the first time! You can change it!
 - To save your crop, click the Checkmark in the tool options.
- We want to correct the color of this photograph. Older photographs and slides tend to become discolored (for instance, 110mm images become very red). There is a tool that autocorrect the colors in an image, called “Auto levels”.
- Image > adjustments > auto levels
- *Save your work!*

Save for Web

- We're ready to save your work for a web page or Powerpoint!
- File > Save for Web
- Save for Web is a tool that lets you compare the setting you will use to save your image, so you can get the best image quality with the smallest file size.
 - Click 2-up – this lets you see 2 previews at once
 - Click anywhere inside the first preview to select it.
 - Change the save setting on the right – choose “JPEG HIGH”
 - Click anywhere inside the second preview to select it
 - Change the save setting to “JPEG LOW”
 - Look at the bottom of each preview window to see the file size and estimated download time.
 - Select the preview you would like to save.
 - Click Save, and save the file on the desktop. Photoshop will automatically add the appropriate file extension.
 - Repeat for 'layers.psd'.
 - Go to Internet Explorer, navigate to your email server, and send the images to yourself as attachments!

Notes

A large, empty rectangular box with a thin black border, intended for taking notes. It occupies the upper portion of the page below the 'Notes' header.