**New and Changed in Photoshop CS5**

Refine Edge
When making selections in Photoshop, the Refine Edge command, located in the tool options bar can be a big help in cleaning up difficult selections. To use Refine Edge, start off by making your basic selection using any of the selection tools - Quick Select and Magic Wand both work well for objects that don't have well defined edges. With your basic selection made, click on the Refine Edge button to open the dialog box shown here:
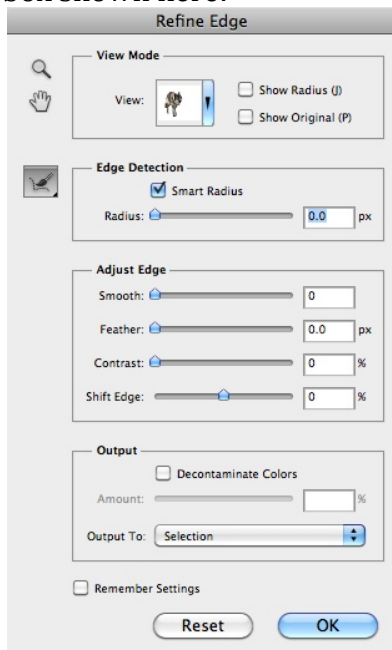
The View Mode option lets you see your selection in a variety of ways, I find the Overlay view the most useful to start with, it masks everything but your selection in transparent red, making it easier to see where you need to do clean up work.

You'll also want to enable Edge Detection by checking the Smart Radius box. This option helps detect the edges in your selections to set the radius, or width, of the area that is being refined.

Depending on your object and the type of edges you're selecting, the Adjust Edge options can be used to smooth the selection, and to soften (Feather), or increase the contrast in the selected edges, as well as move your selection in or out by small amounts to fine tune it.

The Output section has options to Decontaminate Colors. This is applied to the background of the image, and if you select it, you are required to apply your mask to a new document or layer to avoid making unwanted changes to the original background.

The other two options in this dialog are the brush types - by clicking on the brush icon, you can select whether to Refine the radius by painting along the edges, or to erase the refinement, by painting over areas you want to remove.

I'll start with this image of a bear by selecting the bear using the Quick Select tool, and then choosing Refine Edge.

By checking the Show Radius box, and enlarging the Smart Radius amount, I can see where the edges of my selection are going to be applied as shown below:

The next step is for me to clean up my selection a bit. For this particular demo, I'm going to switch over to the On Layers view to make it easer to see what changes I'm making. With the Refine Radius tool selected, I'll paint around the edges of the bear to make sure I have the fur within my selection. By increasing the Contrast, I can improve the results.

The areas where you can see detail are the areas that Photoshop is going to apply masking to, making the background fall out of my selection and leave only the bear.

Finally, if there are any mistakes I've made in my selections, I can use the Erase brush before applying the mask refinements. I'm going to output to a new layer with layer mask. In the figure below, you can see the results of my mask, with good fur selection that would have been very difficult to make any other way.

65.97%   Exposure works in 32-bit only ▶

Mixer Brush

Another fun new feature in CS5 is the Mixer Brush. This brush, located in the toolbar with the other brush tools lets you turn your photographs into a painting. This works best with a graphics tablet that lets you control brush direction and pressure, but it can be used with a mouse as well. In the figure below, I started with a photo of
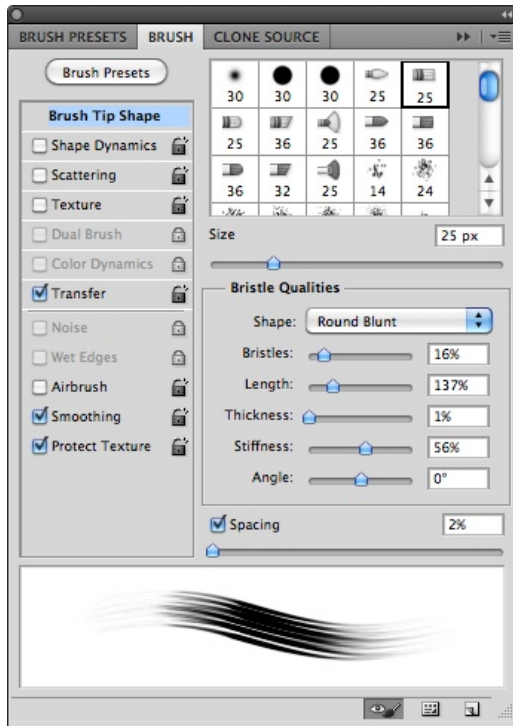
a bearded iris:

Selecting the Mixer Brush tool
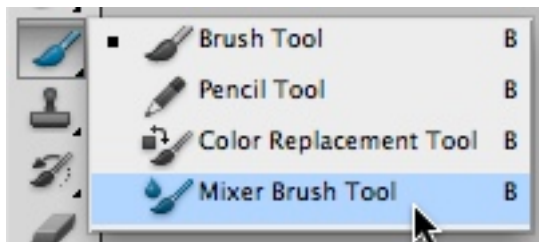
I then open the brushes palette

And select the brush shape I want to work with. While you can paint directly on your image, I find it is useful to make a new layer by selecting Layer > New Layer and painting on this. When you do this, select the Sample All Layers checkbox. The other advantage to using a new layer is that you can turn the visibility of the original layer off to check your progress.
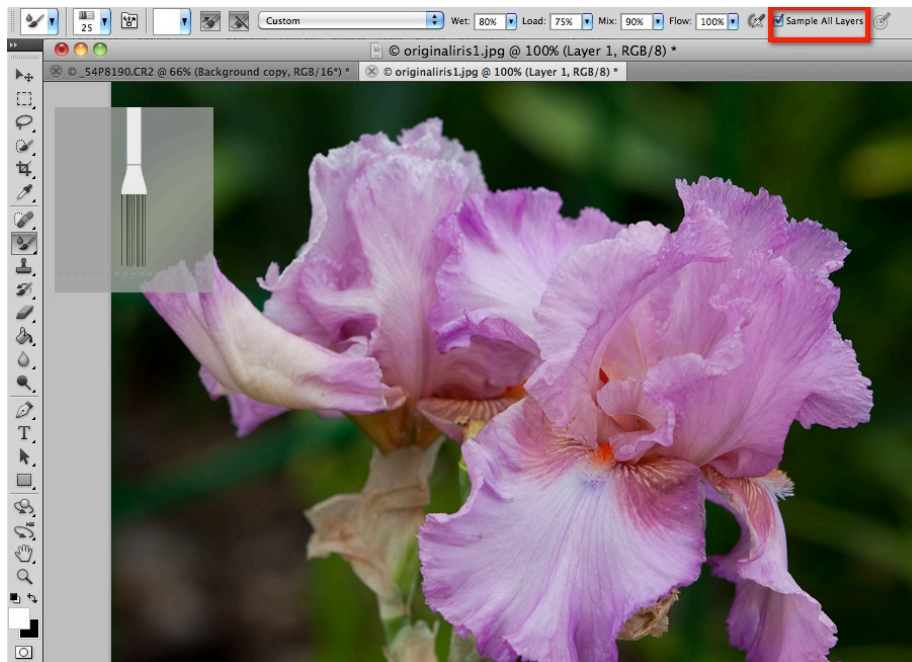
Now, start painting! You can vary the size of the brush and the selected brush as you go along to suit the image. The quickest way to change brush sizes is with the [and] keys.

Here's the result of my painting on this iris photo:

Straightening Images

Prior to CS5, straightening the horizon or vertical lines in an image wasn't very obvious – you had to use the crop tool, dragging out a selection and then moving the mouse to a corner and dragging up or down, trying to get it right by eye. With CS5, the Ruler tool now includes a Straighten option.

To get started, select Analysis > Ruler Tool. Now, click and drag a line in your image that should be level, like the one shown below where I've used the horizon as a guide.

Now, click the Straighten button in the tool options bar:

Photoshop will use the ruler line as a guide and rotate your image to make that horizontal, cropping as needed.

There are a number of other new features in CS5 that go beyond the scope of this Bootcamp class. I cover some of them in my more advanced Layers class, and if you have questions about a specific feature, I'm more than happy to answer and help out.