

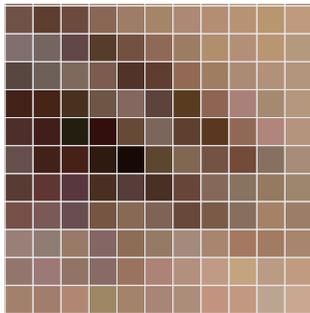


# INTRODUCTION TO PHOTOSHOP

Photoshop lets users edit digital photographs and create original artwork, including type designs. In C226, we will work with a relatively small range of its functions, just enough for you to edit your digital photographs and prepare them for your slide show.

If you want to learn more about this industry-standard application, consider taking upper-level photojournalism and graphic design electives.

## UNDERSTANDING PHOTOSHOP



A digital image file in Photoshop comprises thousands to millions of small, square Picture Elements, called **pixels**. They are arranged in a matrix of rows and columns. Each pixel is filled with a color, black, white or a

shade of gray. Each pixel exists where a row and column intersect, meaning it can be identified with horizontal and vertical coordinates. This lets you select pixels and edit them. Editing changes can be made to a single pixel, a group of pixels or an entire file.

## WHAT ETHICS SHOULD I OBSERVE?

Photoshop allows users to alter the contents of photographs — adding, deleting, moving or cloning items — in ways that are ethically unacceptable in journalism. However, most photojournalists consider it acceptable to perform corrections on electronic images that were traditionally done in wet chemistry darkrooms. These adjustments compensate for shortcomings in the chemical and material properties of the photographic medium — and now for its electronic/digital inadequacies. They restore the photo to what a viewer would have seen at the scene where it was taken. Such adjustments include correcting exposures of parts of, or entire, images, lightening and darkening selected areas, removing spots and scratches, and restoring color balance. Cropping — removing parts of an image around its edge — is also widely practiced.

## THIS HANDOUT COVERS:

- 1) *cropping*
- 2) *adjusting exposure levels*
- 3) *adjusting color balance*
- 4) *using the Burn, Dodge and Sponge tools*

These skills, used in all print and electronic publishing, can make the difference between a muddy image and a crisp picture that communicates its message clearly.

*NOTE > Not all photographs can be rescued. Some exposures are too far outside the acceptable range to be corrected. It's much better to get a correct exposure while you are photographing.*

**Aesthetics of editing.** Keep your changes subtle. They should be undetectable. Don't overdo it. Don't be obvious. Don't try to perfect reality.

## HOW DO I CONTROL THE SOFTWARE?

You control Photoshop through mouse clicks, menus, keyboard shortcuts, palettes, dialog panels and tools. Most of these work the same as in other programs. For example, under the File menu, the New, Open, Save As and other familiar menu commands perform the same functions as in all software. Such keyboard commands as  $\text{⌘} + c$ ,  $\text{⌘} + x$ ,  $\text{⌘} + v$  and  $\text{⌘} + z$  perform the same editing functions. Selecting menu items with an ellipse (...) opens a dialog panel. Selecting menu items with a triangle opens a submenu. The primary differences — what gives Photoshop its unique functionality — are found in its tools, palettes and dialog panels.



**Toolbox.** The main section of the Photoshop Toolbox contains 20 tools arranged in four groups. Eighteen tools have triangles which indicate pop-up menus with alternate tools, for a total of 66 tools. To select an alternate, press the mouse on a tool and hold until the menu opens, drag to the desired alternate and release. To use a tool, click on

it, release the mouse, drag over the file and press to start painting.

Tools work in conjunction with the Options Bar, shown on Page 3 for the Sponge Tool. The Options Bar lets you customize each tool's functions.

Below the tools in this panel is the color area. Below that is an icon that lets you toggle between normal working mode and quick-

mask mode, plus screen modes.

The main tools we will use in J210 are Cropping, third in the left column, Dodge, seventh in the right column, and its alternates, Burn and Sponge.

## HOW DO I CROP?

Cropping is the term for removing parts of a picture around its edges. In effect, it changes a photograph's framing. Typically, it's used to get rid of unnecessary or unwanted contents, especially ones that distract from the focal point. It's also used to reposition the focal point within the frame and to call attention to a detail by positioning the edge of a photo near it.



To crop in Photoshop: **a)** Choose the Cropping Tool. **b)** Position the cursor towards the top left of the file, press down on the mouse button and drag towards the lower right to draw a marquee (rectangle) around the area of the picture you want to keep. **c)** Release the mouse.

You don't have to be exact on this first drag. Notice that everything inside the marquee is vivid, and everything outside appears ghosted.

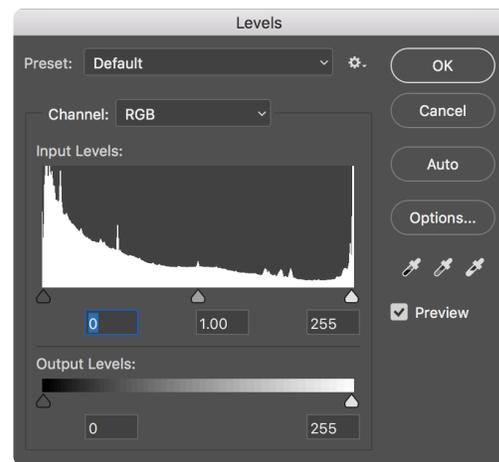
**d)** At the corners and sides are the editing handles. Adjust your crop by dragging these handles in or out, or rotate. **e)** When you have exactly the crop you want, tap the Return Key, and the pixels outside the marquee are deleted.

If you decide you don't want to crop, tap the Escape Key, which removes the crop marquee.

## HOW DO I ADJUST EXPOSURES?

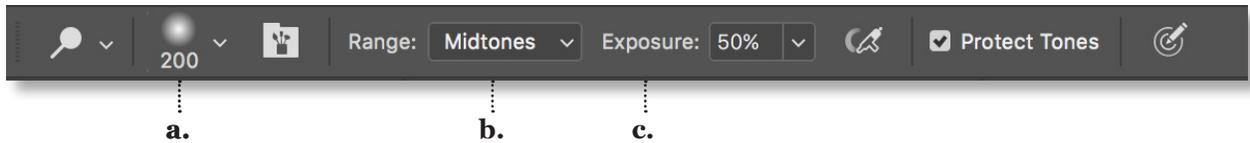
It's best, of course, to get a correct exposure when you are shooting, but Photoshop lets you correct images that are as much as one F-stop underexposed or overexposed. There are several ways to do this, but we'll use two that are easy and effective.

**1.** If your image looks too light or too dark, from the Image Menu > Adjustments > Levels (**⌘+L**). This opens the Levels panel, which shows a histogram in its main window.



**Histogram.** Photoshop breaks the tonal scale into 256 values from lightest to darkest. A histogram is a column chart that shows how many pixels in the file are at each of these 256 levels.

**2. Auto.** The first, and easiest step is to make sure the Preview button is checked then click the Auto button at the middle right. Photoshop evaluates the range of pixels in your image and calculates what it thinks is the ideal exposure.



You'll see the histogram change. If this produces the desired result, click OK and save the change.

If it does not, hold down the Option key. This changes the Cancel button to Reset. Click Reset, and make manual adjustments.

Beneath the histogram are three triangles: The black at left controls shadows, the gray controls midtones and the white controls highlights.



**3. Manual.** In this example, the columns stop short of the left and right ends. That means the file isn't taking advantage of the entire

256-step range of the tonal scale. When you see a situation like this, drag the black triangle toward where the columns begin at the left, and the white triangle toward where they begin at the right. Also try dragging the gray triangle left or right. Experiment to get an intuitive feel for what results these triangles produce. If you don't like the results, press the Option key, click the Reset button and try again.

Stop dragging when the exposure in the photo looks correct. Click OK and save.

**4. Adjusting color balance.** If the colors in your image seem out of balance, from the Image Menu > Adjustments > Auto Colors. Photoshop evaluates the colors and calculates what it thinks is the ideal spread. If the image does not look right after Auto Colors, type  $\text{⌘} + z$  to Undo. You may have to live with the incorrect color balance. If it's way off, consider choosing another photograph or reshooting.

## HOW DO I MAKE CORRECTIONS WITH TOOLS?

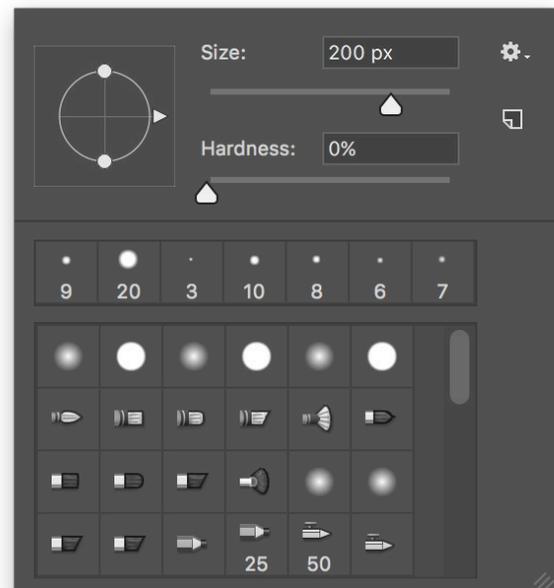
Palettes change the entire file or selected areas. Tools change only the pixels you drag them over.



**1. The Dodge Tool.** To lighten an area of the photograph, choose the Dodge Tool. Before you start applying

it, choose settings in the **Options Bar** (above) at the top of your monitor:

**a.** First, choose the brush size. Press on the triangle next to Brush and a menu opens. Drag the slider bar to the left to decrease the brush size; drag to the right to increase it. Drag the mouse over the file to see how large the brush is in relation to the image. When you get the desired size, click the triangle again to close the menu. Generally, choose a brush size about the size of the area you want to correct.



**b.** Decide if the pixels you want to correct are in the shadows, midtones or highlights. Choose this setting from the Range menu.

**c.** Change the Pressure setting in the Exposure menu from 50 percent to 10–15%. It's better to make several smaller adjustments than to work at the default 50% and overdo your corrections.

**d.** Finally, hold down the mouse button and drag over the pixels you want to lighten. Typically with the Dodge Tool, you are trying to lighten skin tones in a face or bring out detail in the shadows.



Continue working by making small drags until the area is lightened, but don't overdo it. You do not want your editing to be noticeable. If you make a change that doesn't work, type  $\text{⌘} + z$  to undo it. Or use the History Palette, discussed below, to return to an earlier state. Some areas may be too dark to correct.



**2. The Burn Tool** darkens pixels you drag it over. It works the same as the Dodge Tool: From the Options Bar, choose the Brush size, Pressure setting and Highlights, Midtones or Shadows.

With the Burn Tool, you are trying to darken tonal areas that are so bright that they detract from the picture's focal point. Again, don't overdo it, or your results will look unnatural. Don't try to turn a highlight into a shadow; just tone it down a bit.

**3. The Sponge Tool** decreases or increases the color saturation of the pixels you drag over. It works the same as the Dodge and Burn tools, except you choose Saturate, which makes the colors more vivid, or Desaturate, which makes them duller. In the Options Bar, top of Page 3, Desaturate is chosen.



## HOW DO I REMOVE SPOTS AND SCRATCHES?

You should not encounter any spots and scratches on photographs made with digital cameras. But if you're working with files from photographic prints that were scanned (digitized), you may see them.

Choose the **Stamp Tool**. Choose a brush size relative to the spots and scratches you want to remove. Think about spotting as bad pixels that you want to replace with good pixels. Hold down on the Option key and click your cursor on some good pixels. Move the cursor over the bad pixels and paint them away. Photoshop replaces the areas you paint over with the pixels you've selected.



*NOTE > The ethical standards in C226 and in the photojournalism profession prohibit deleting, adding or moving content. Use the Stamp Tool to correct imperfections, not to change content.*

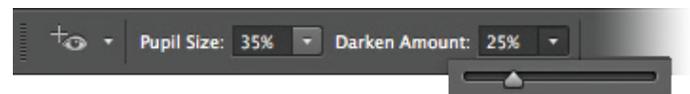
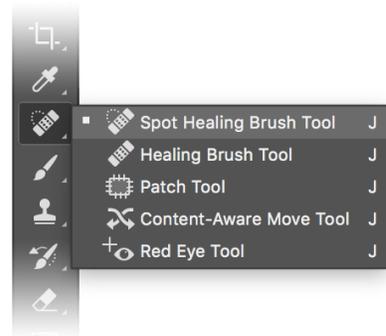
## HOW DO I GET RID OF RED EYE?

We strongly recommend you turn off the flash and shoot with available light. However, if you do use flash to photograph people, you will often see the red eye effect. It's caused by the intense light of the flash reflecting off the person's retina.

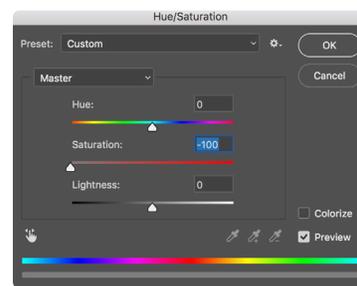
You could use the Stamp Tool, but Photoshop makes it much simpler with the Red Eye Tool.

Open the file and zoom in over the eyes.

Press and hold on the Healing Brush Tool. When its alternate tools pop open, choose the Red Eye Tool at the bottom of the menu. In the Options Palette across the top of your monitor, choose the Pupil Size and Darken Amount settings. Move your cursor over an eye and click. Photoshop finds all the red pixels and replaces them with pixels from the subject's iris.



## HOW DO I TURN A COLOR PHOTO B&W?



To turn a color photo into a black and white one, use Photoshop to remove all its saturation. From the Image menu > Adjustments > Hue/Saturation.

When the panel opens, move the Saturation slider bar all the way to the left. The value will read -100. Click OK, and your photo is black and white.