

Application: Resize and crop images, alter the value/contrast/color balance.  
You will need to use this program for Project 1 and 2.

#### **SOFTWARE**

##### **Adobe Photoshop: Image editing only**

Photoshop is a pixel-based image editing software (pixel = picture element). It means that several small dots or pixels make up an image. The higher the number of dots and the smaller the size of the dots, the better the quality of the image. When a pixel-based image is enlarged, the size of the existing pixels are increased.

Note: Photoshop is not a magical tool that can make a bad photograph great.  
Also, do not use Photoshop to set type or draw forms/shapes.

#### **UNDERSTANDING THE BASIC FUNDAMENTALS OF PHOTOSHOP**

##### **What is “Resolution” or “dpi”?**

Resolution is a measurement of the total number of pixels displayed. It determines the “finesness” of the image and is measured in dpi (Dots Per Inch). So, for example, if you have a 180 dpi image, there are 180 pixels for every inch.

When printed, an image with a high resolution contains more, and therefore smaller, pixels than an image with a low resolution. Higher-resolution images can reproduce more detail and subtler color transitions than lower-resolution images because of the density of the pixels in the images.

Enlarging a small area in a photograph increases the size of the pixels and distorts the image. If you do enlarge an area, ensure that your final image size has a resolution of at least 180 dpi. At a size of 6"x9", an image with a 180–300 dpi resolution range would print well. Anything less than 180 dpi would most likely print with visible pixels looking like a stack of bricks.

#### **RESIZING**

##### **Image Size: Image > Image Size**

Always check the Constrain Proportions checkbox. This will ensure that you won't distort your image when you resize it. When either the width or height is changed, the other will change, too. Pay attention to the dpi when you size an image.

#### **BASIC IMAGE EDITING**

##### **Color Mode: Image > Mode > CMYK, RGB, Grayscale**

CMYK and RGB are two different color mode systems for creating/reproducing color. CMYK (Cyan-Magenta-Yellow-Black) is the four-color process used by commercial printers to print a color image. RGB (Red-Green-Blue) color mode is used for display devices such as computer monitors and televisions. This is why colors on a screen image are often different when printed. The two modes produce color in a different way. If you want black and white photography, Grayscale will remove all of the color information in the image. When creating images for print media, you will usually need to use CMYK or Grayscale.

##### **Levels: Layer > New Adjustment Layer > Levels**

Sometimes a photograph looks dull or flat due to a lack of contrast. Adjusting the levels of an image is a simple way to improve the quality of your photograph. By adjusting the levels, you proportionately alter the number of light and dark pixels.

When you open the levels palette, you see a histogram that represents the pixels of your image in graph form. The gradient at the bottom shows the number of pixels the image contains charted from dark to bright tones from left to right.

##### **Brightness and Contrast: Layer > New Adjustment Layer > Brightness/Contrast**

The brightness/contrast option is very basic and used for quick adjustments. The higher the brightness value, the brighter and lighter the image. The contrast value works the same way. It does not offer much control, and may adversely affect print quality. It is best used sparingly.

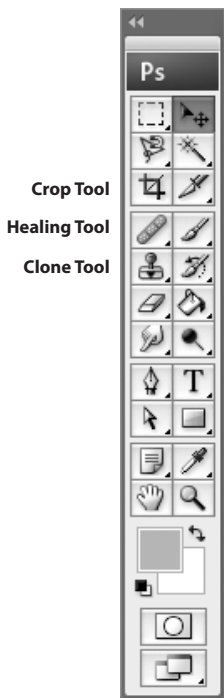
**CHANGING COLOR TONES OF AN IMAGE****Color Balance: Layer > New Adjustment Layer > Color Balance**

Sometimes a photograph looks too yellow, too blue, or too red. The color balance palette allows you to specifically change the tonal colors of the image. Clicking and dragging the sliders to the left or right will change the tonal color of the whole image to that specific color. You can adjust the shadows, midtones, or highlights of an image individually as well.

**Hue/Saturation: Layer > New Adjustment Layer > Hue/Saturation**

If your photograph has dull colors, you can increase the intensity of the color within the saturation palette. Clicking and dragging the sliders to the left or right will change the color intensity of the whole image. It does not offer much control, and may adversely affect print quality. It is best used sparingly.

Photoshop Main Toolbar

**ADDITIONAL EDITING****Crop Tool: Main Toolbar**

This tool allows you to remove large sections of the image.

**Clone Tool/Healing Tool: Main Toolbar**

The clone tool and healing tool allows you to copy a part of an image to another area of the image by pressing and holding the <alt> key while clicking on an image, then using the tool in another area.

**Rotating an image: Edit > Transform > Rotate**

Rotating an image allows you to control straight lines within your photo.

**CROP MARKS AND BLEED****Crop Marks: File > Print**

In the printer dialogue box you can check the box for corner crop marks. Make sure to include a 0.125" bleed as well under the Bleed button.

**SAVING YOUR FILES****TIF or TIFF (Tagged Image File Format)**

This file format is mainly storing images, including photographs and line art. This keeps the original file uncompressed, thus retaining all the image resolution and color information. TIFF is the standard file saving method for print.

**JPEG (Joint Photographic Experts Group)**

This file format is the best in terms of compression. A JPEG will compress a file to (40%–80%) of its original size. But JPEGs compress by discarding color and resolution information. So each time you save/resave JPEGs, the more information you lose. JPEG is a standard format for screen viewing.

**EXTRA PHOTOSHOP FEATURES****Filters**

For these assignments, resist the urge to use Photoshop filters. Filters do not make your image more interesting, instead they make it distorted and unnatural. Allow your images to speak for themselves.

**PHOTOSHOP HELP****Help (last tab on the menu bar): Help > Photoshop Help...**

The Help guides allow you to search questions and also reference subjects by contents.

If Photoshop Help doesn't answer your questions, Google it. It is more than likely someone else has asked the question before.