



University Information  
Technology Services

# Photoshop CS5.1

Photoshop Essential Skills

University Information Technology Services

Training, Outreach, Learning Technologies and Video Production

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# University Information Technology Services

## Photoshop CS5.1 Essential Skills

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## Introduction

Photoshop is the industry-standard photo editing program from Adobe. This booklet is designed to introduce you to the essential skills you need to get started using Photoshop. These instructions were created using Photoshop CS5.1 for Windows; the Mac OS X version is similar.

## Opening Photoshop

Follow these steps to launch the Photoshop program on your Windows PC.

1. Click the Windows **Start** button.
2. Click **All Programs**.
3. Scroll down and click the folder **Adobe Master Collection CS5.5**.
4. Click **Adobe Photoshop CS5.1**.



## Opening a File

Follow these steps to open an image file after you have opened the Photoshop program.

1. Click the **File** menu at the far left of the Photoshop menu bar.
2. Click **Open...**
3. Browse to an image file on your computer and select it.
4. Click the **Open** button.

# Important Terms


## Basic Terms for Digital Graphics

- *Pixel*: the smallest unit of a graphic; a tiny square of color.
- *Resolution*: the PPI (pixels per inch) of a graphic. 300 ppi is recommended for print, 72 ppi for web.
- *Raster*: a type of graphic made of pixels; photographs are raster graphics.
- *PPI*: Pixels per inch; see Resolution.
- *Crop*: Removing part of an image.
- *Resize*: Making an image smaller as a whole, without removing any part of the image.
- *Layer*: Photoshop files can include many *layers*; the layers stack together to create the final image. Use layers to keep control over the various parts of your graphic. Layers can be rearranged, modified, hidden, or deleted.

## File Formats

- *JPG*: A commonly-used file format for photos; does *not* support transparency.
- *BMP*: A commonly-used file format for photos; does *not* support transparency.
- *PNG*: A commonly-used file format for photos with transparency support.
- *PSD*: The file format for your editable Photoshop files.

## “Oops!”

- *Undo*: Using the function **Edit → Undo** (or the keyboard shortcut Ctrl-Z) will undo your last step. You can only use *Undo* for the single most recent action in Photoshop.
- *History*:  Photoshop keeps a *history* of your 20 most recent edits. You can step back to any of these historical steps to undo your changes. *See page 17 for more information about History.*
- *Revert*: Revert changes your file back to the last saved version, undoing all changes made since the last time you saved, with the function **File → Revert**.

## Tools & Workspace

When you open an image in Photoshop, your workspace will be laid out in the default configuration, the *Essentials* workspace. See Figure 1 to identify important areas of your workspace.

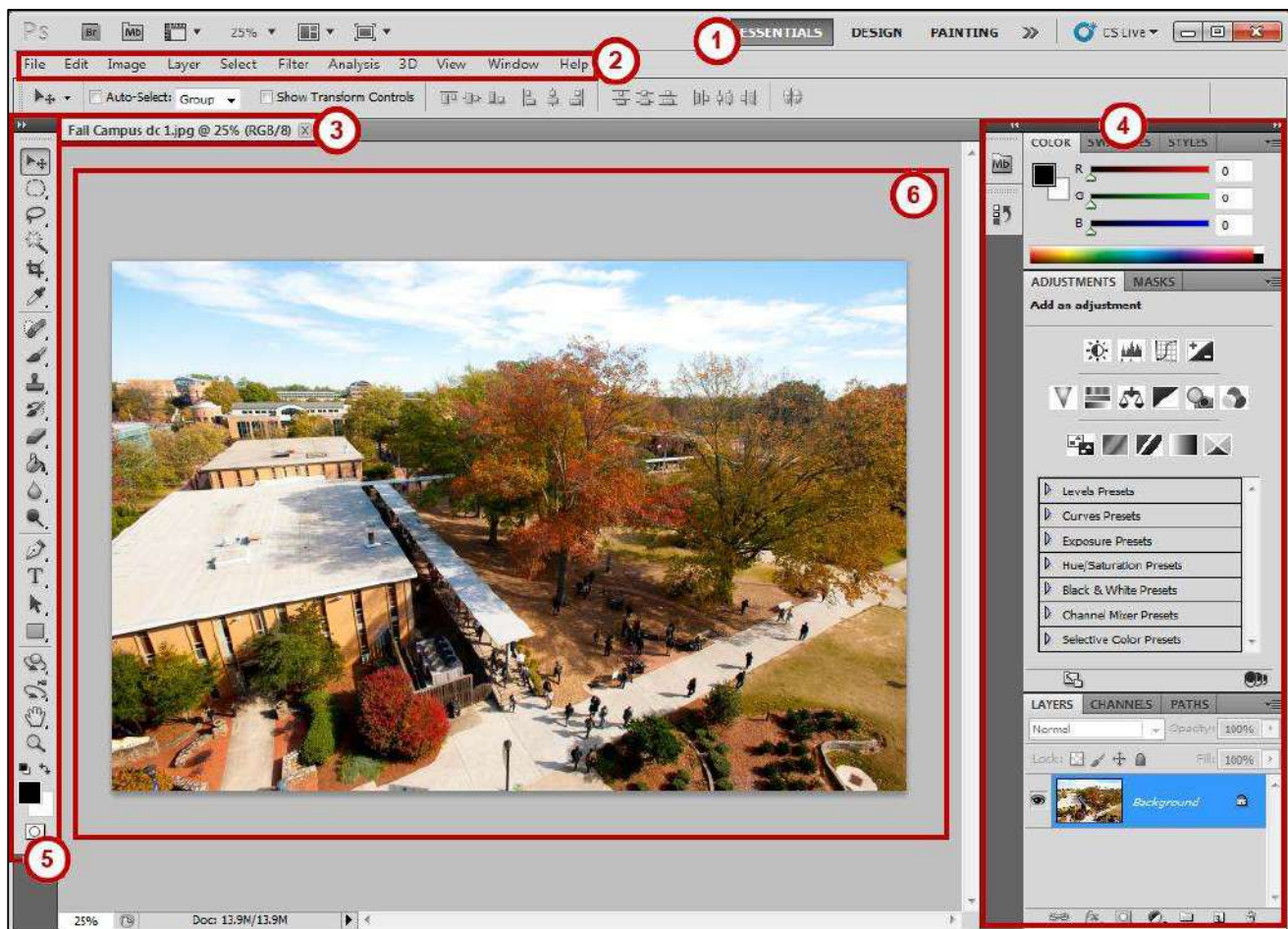


Figure 1. Layout of Photoshop tools and workspace.

1. **Workspace selection** area: A workspace is the selection of Photoshop tools laid out on your screen for easy access. The default workspace is *Essentials*.
2. **Menu Bar**: File, Edit, and more. Photoshop functions are available from these dropdown menus.
3. **File tab**: You will have a tab for each file you have open.
4. **Panels**: Frequently-used functions can be arranged in the Panels area for easy access.
5. **Tools panel**: Tools including move, select, type, and shapes. See the following section.
6. **Open image**: Your main workspace in Photoshop, where you will work with the open image.

## Tools Panel

The Tools panel includes all the tools you will use to directly modify or create images in Photoshop.

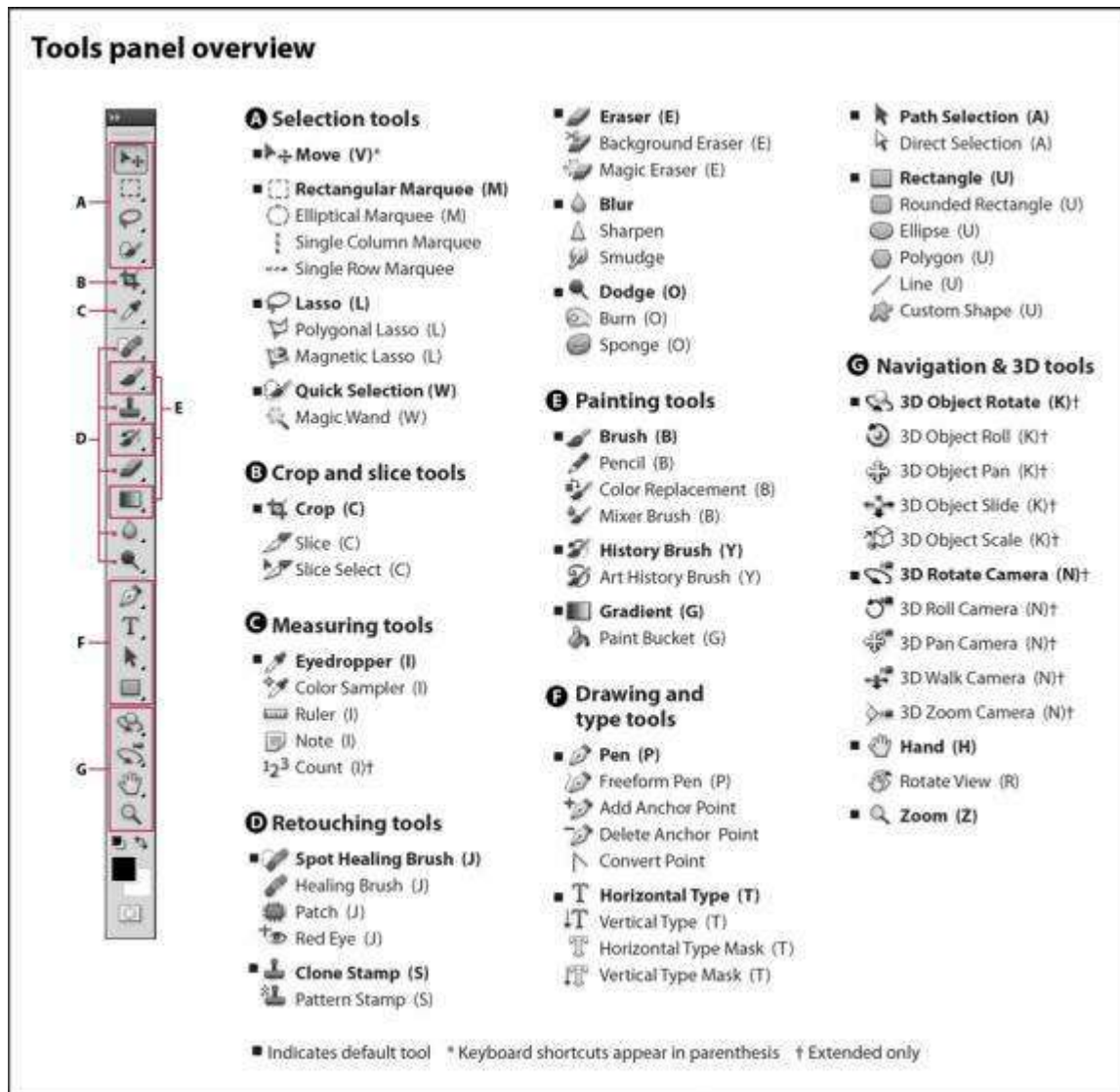


Figure 2. Tools in the Photoshop tools panel; image from [Adobe](#).


Image from Adobe, <http://helpx.adobe.com/photoshop/using/tools.html>; visit the link to see more detail about the tools, including examples.

**Note:** Most tools show a triangle icon (see figure at right), denoting that more tools are hidden behind the one you see.



## Cropping an Image

Use the cropping tool to remove the outer parts of an image.

1. Select the **Crop** tool in the toolbar. 
2. Your cursor changes to the Crop tool.
3. Click and drag to draw a box around the portion of the image you want to **keep** (see Figure 3).

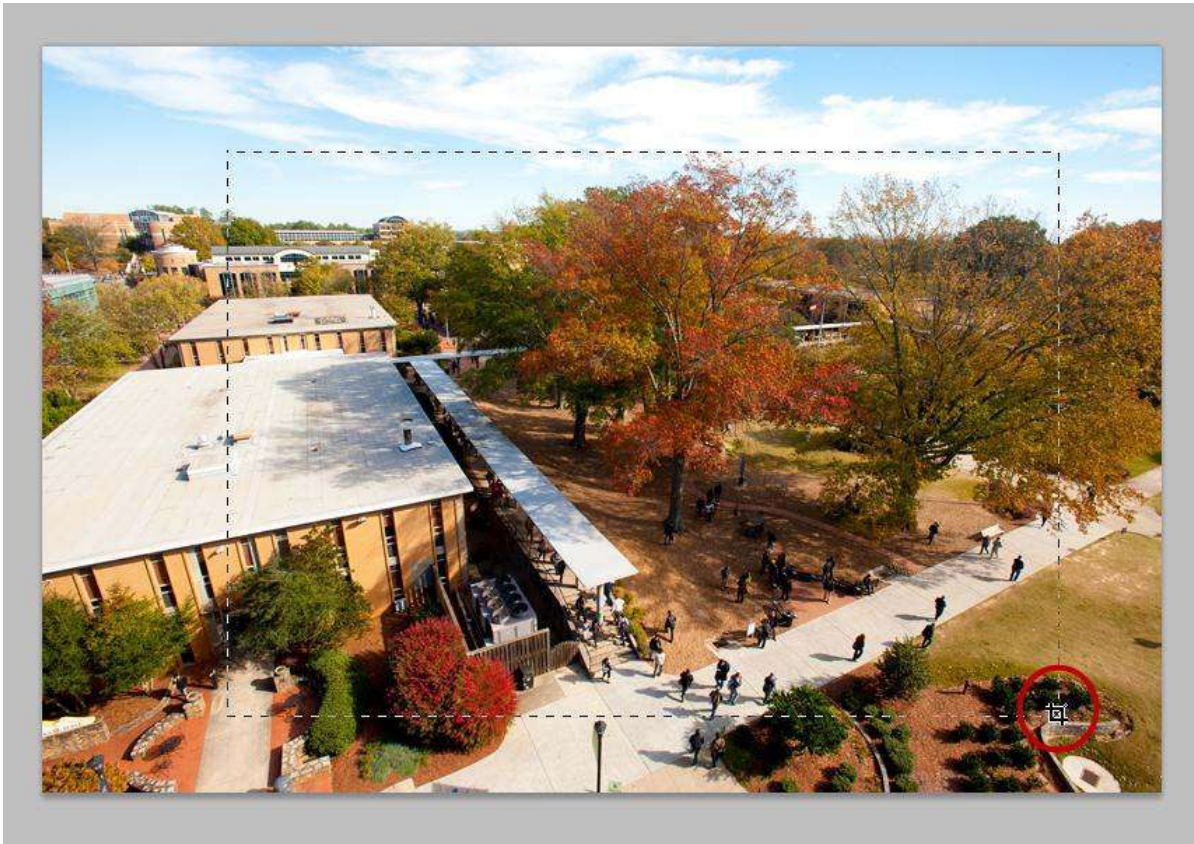


Figure 3. Cropping an image.

4. Press **Enter** on your keyboard to complete the crop.

## Rotating an Image

Use image rotation to turn an image in the proper direction.

1. Select the **Image** menu in the top menu bar.
2. Select **Image Rotation**.
3. Choose the needed rotation amount, e.g. **90° CW** (clockwise).



## Straightening an Image

Use the Ruler tool to easily straighten a crooked image.

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**Note:** The **Ruler** tool is usually hidden behind the **Eyedropper** tool.

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1. Click and hold the **Eyedropper** tool.
2. Select the **Ruler** tool from the menu that appears (see Figure 4).

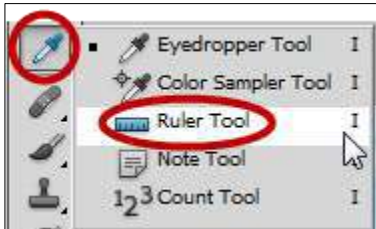


Figure 4. Locating the Ruler tool.

3. Your cursor changes to the Ruler tool. Click and drag to draw a **horizontal line** across your image. **Hint:** Try using a guide from within your image that should be straight, such as the horizon or the top of a table (see Figure 5).

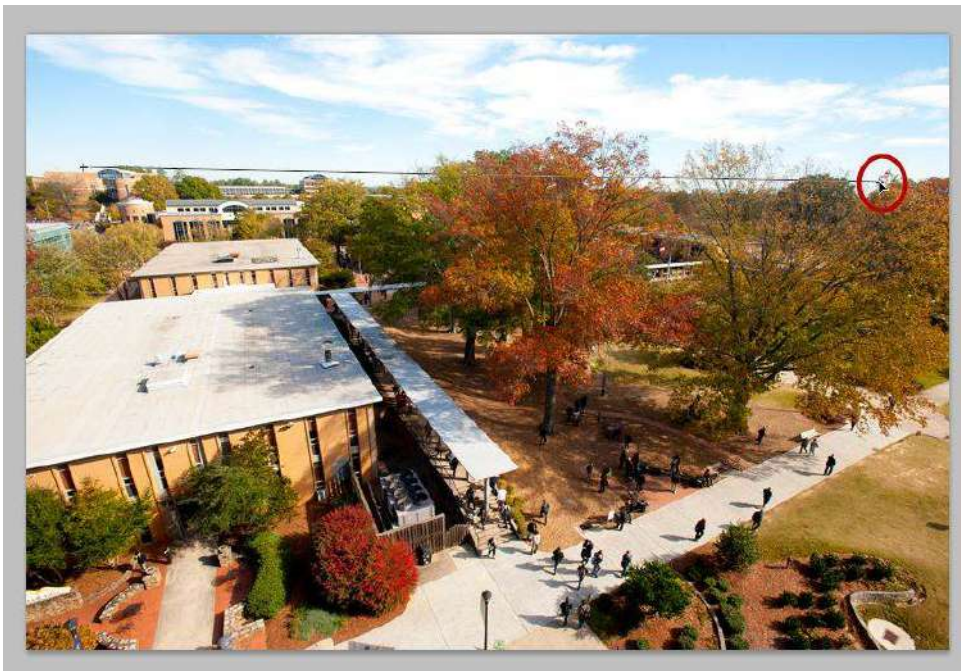


Figure 5. Straightening an image with the ruler tool, using the horizon as a guide.

4. Click the **Straighten** button in the top bar to complete the process.
5. If you are not happy with the results, simply press **Ctrl+Z** to Undo, then try again.

## Image Adjustments

Photoshop includes many tools for adjustments. Use the **Auto** adjustment options to quickly improve your images.

1. Select the **Image** menu in the top menu bar.
2. Select **Auto Tone**, **Auto Contrast**, or **Auto Color**.
3. Photoshop adjusts the tone, contrast, or color of your image.
4. If you are not happy with the results, simply press **Ctrl+Z** to Undo, then try another option.

Use the many options in the Image → Adjustments menu to adjust your image appearance manually.

1. Select the **Image** menu in the top menu bar.
2. Select **Adjustments**.
3. Choose an adjustment type, such as **Brightness/Contrast**.
4. Adjust your image using the options; in this example, brightness and contrast can be adjusted separately (see Figure 6).



Figure 6. Brightness/Contrast image adjustments.

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**Note:** Make sure the **Preview** box is checked (Figure 6) to see a live preview of how the adjustments will affect your image.

---

5. Click the **OK** button to complete the adjustment.

## Layers

Photoshop files can include many *layers*; the layers stack together to create the image. Use layers to keep control over the parts of your graphic. Layers can be rearranged, modified, hidden, or deleted.

## Background Layer

When you first open an image file, you will have a single layer: the **background** (see Figure 7).

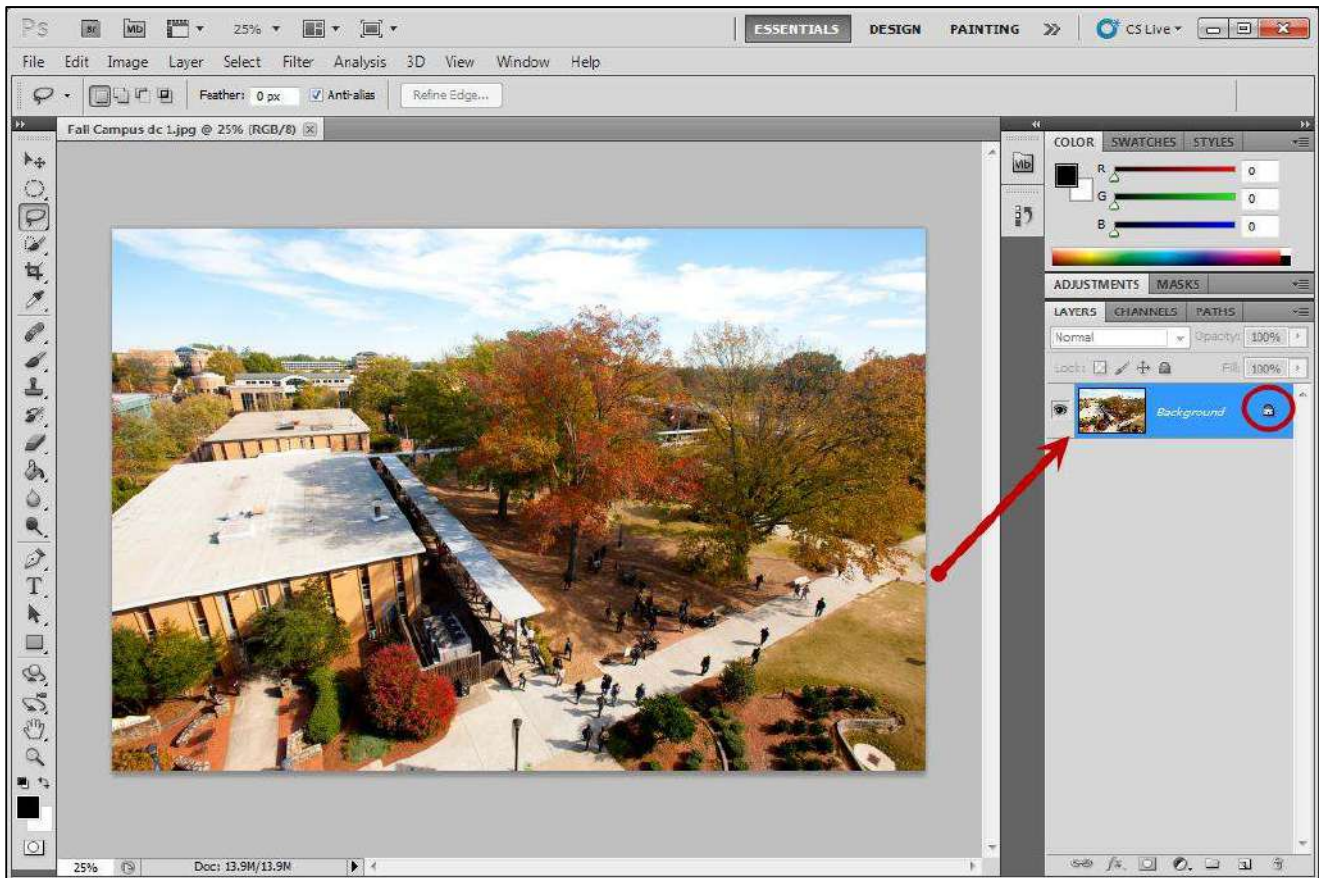


Figure 7. Background layer.

The background layer is locked, indicated by a lock icon (see Figure 7). A locked layer cannot be edited.

## Duplicating the Background Layer

In order to work with your background layer *non-destructively* (maintaining an untouched version of the original image), you can duplicate your background layer before you begin working.

1. Right-click on the **Background** layer in the Layers panel.
2. Choose **Duplicate Layer**.
3. Click **OK** at the Duplicate Layer prompt.

A new layer is created called *Background copy*. This layer is unlocked and can be edited. Your original Background layer is maintained behind the Background Copy layer.

## Creating a New Layer

Create a new layer to add to your image file without permanently affecting your existing layers.

1. In the Layers panel, select the **New Layer** icon (see Figure 8).

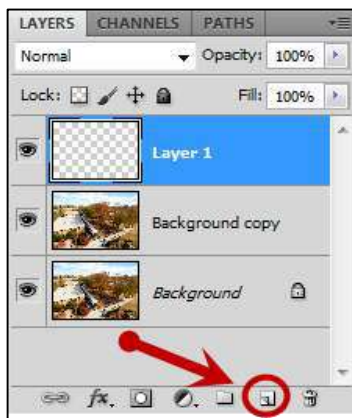


Figure 8. Create a new layer.

2. A new transparent layer is created.

## Layer Opacity

Each layer has a variety of properties and possible effects. *Opacity* is one of those options, making the layer transparent.

1. Select the layer in the Layers panel.
2. Click the **arrow** next to Opacity 100%.

Drag the slider to the desired opacity (see Figure 9).

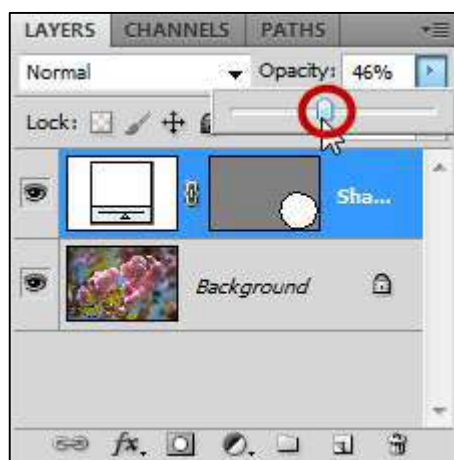


Figure 9



Before opacity change (100%)



After Opacity change (46%)

Figure 9. Setting layer opacity.


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**Note:** 100% is fully opaque and 0% is fully transparent.

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## Adding Text to your Graphics

Use the Type tool to add text to your graphics in Photoshop.

1. In the toolbar, select the **Type** tool. 
2. Above your image, the Type toolbar will appear (see Figure 10).

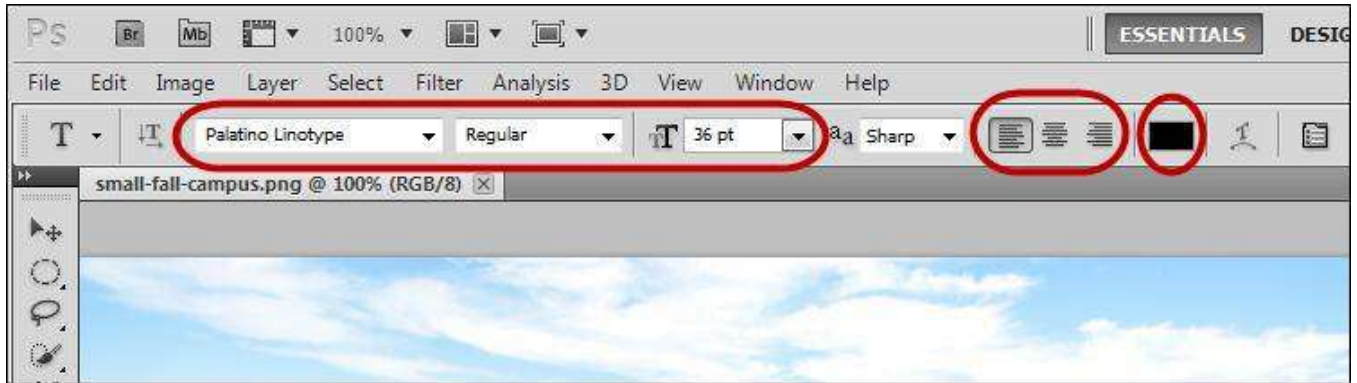


Figure 10. Selections for text on the type toolbar.

3. Select the desired formatting for your text, including the **font**, **style** (e.g., bold or italic), **font size**, **alignment** (e.g., left or center), and **color**.
4. **Click** once within your image where you would like to enter your text.
5. Type the desired text.
6. Click the **check mark** next to the type toolbar to commit your changes (see Figure 11), or use the keyboard shortcut **Ctrl+Enter**.

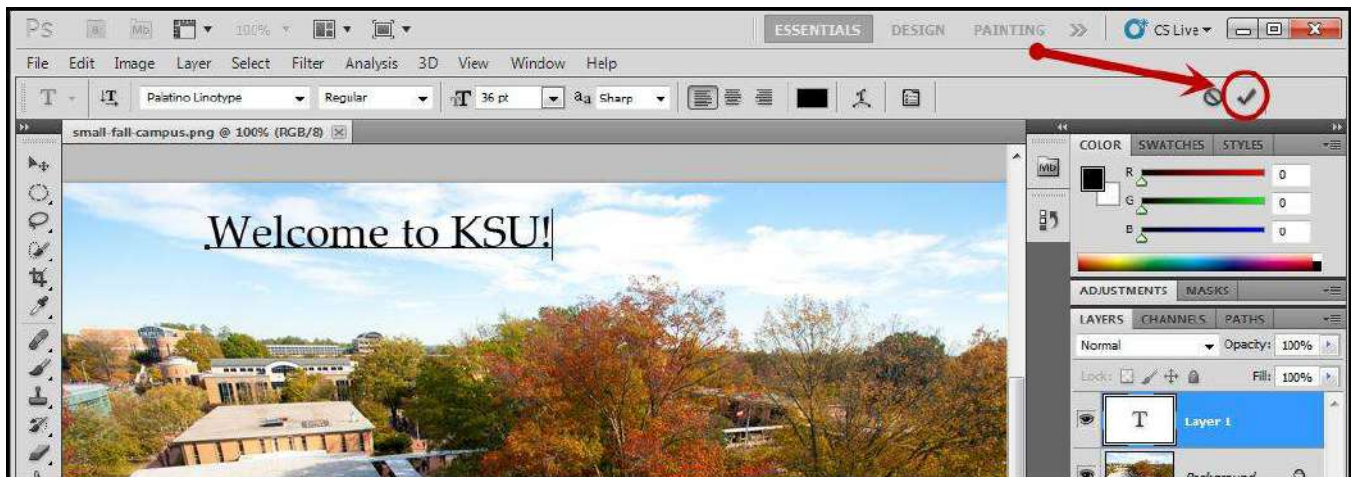


Figure 11. Click the check mark to save your typed text.


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**Note:** When you create text with the Type tool, a separate layer is automatically created for the text.

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## Editing Text

Use the Type tool to edit text that you have already entered in Photoshop.

1. In the toolbar, select the **Type** tool. 
2. Click once within your existing text.
3. To make a formatting change: highlight all the text, then make your changes within the Type toolbar above your image.
4. To make a change to the typed text: type or delete text as normal.
5. Click the **check mark** next to the Type toolbar to commit your changes (see Figure 11), or use the keyboard shortcut **Ctrl+Enter**.

## Moving text

Use the Move tool to move text that you have already entered in Photoshop.

1. In the toolbar, select the **Move** tool. 
2. In the Layers panel, click once to select your type layer (see Figure 12).

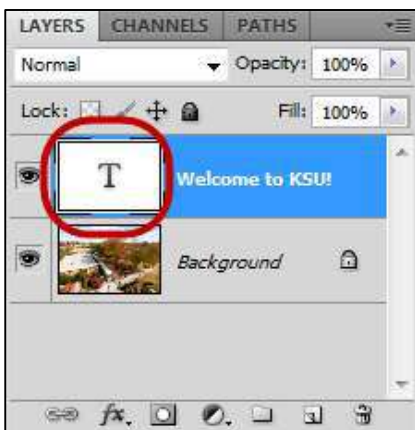




Figure 12. Select a type layer.

3. Click and drag the text placed in your graphic to move it.
4. Use the keyboard arrows to make more precise adjustments.

## Adding a Shape

Photoshop includes 6 separate shape tools: rectangle, rounded rectangle, ellipse, polygon, line, and custom shape.


1. In the toolbar, click and hold the shape tool to choose the desired shape, e.g. the  **Ellipse Tool**.
2. Use the **foreground swatch** at the bottom of the toolbar to choose the color for  your shape.

3. Click and drag over your image to create the shape. Hold down the **Shift** key on your keyboard to create a perfect circle or perfect square, if desired.

Your shape appears over your image, automatically receiving its own layer.

### Moving a Shape

After creating a shape, you can move it on the canvas.

1. Select the **Move Tool** from the toolbar. 
2. Select your shape layer in the Layers panel.
3. Click and drag to move the position of your shape.

### Resizing a Shape

After creating a shape, you can still resize or transform it.

1. Select your shape layer in the Layers panel.
2. Click **Edit** in the top menu.
3. Choose **Free Transform Path**.
4. Resize/transform your shape, using the squares at the corners and sides of your shape.
5. Click the **check mark** in the top toolbar to commit your change.

## Image Repair

Photoshop includes a variety of tools for repairing and modifying images, from repairing blemishes and red eye to removing elements from your images.

### Removing Red Eye

Red eye occurs in some photos due to flash photography, but it is easily repaired in Photoshop.

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**Note:** The **Red Eye** tool is usually hidden behind the **Spot Healing Brush** tool.

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1. In the toolbar, click and hold the **Spot Healing Brush**.
2. From the menu that appears, choose the **Red Eye Tool** (see Figure 13).



Figure 13. Selecting the Red Eye Tool.

3. Click in the center of the red eye to be repaired.

The red eye is repaired.

## Removing Blemishes or Small Imperfections with the Spot Healing Brush


1. In the toolbar, choose the **Spot Healing Brush**. 
2. Click and drag the brush over the imperfection; the area becomes shaded (see Figure 14).




Figure 14. Covering an imperfection with the Spot Healing Brush.

3. Release the mouse button to reveal the repaired area.

## Removing Unwanted Elements with Content-Aware Fill

Before you can use Content-Aware Fill, you must first select the area of your image to remove. There are a variety of tools in Photoshop to make selections, including the Marquee tools, the Lasso tools, the Magic Wand, and the Quick Selection tool. This example uses the Elliptical Marquee.

1. Select the **Elliptical Marquee** tool from the toolbar. 
2. Click and drag to draw a circle around the element you wish to remove.
3. Click the **Edit** menu item.
4. Choose **Fill**.
5. The Fill menu appears (see Figure 15). **Content-Aware** should be selected in the *Use* drop-down.

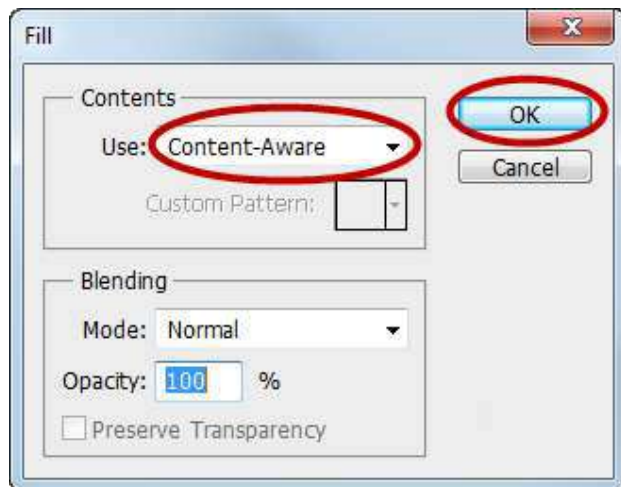


Figure 15. Content-Aware Fill.

6. Click the **OK** button.
7. To de-select the area you outlined with the elliptical marquee, choose **Select** in the top menu, and then **Deselect**.



## Using History to Reverse Steps

Photoshop's History panel keeps a record of the last 20 changes you have made in Photoshop. You can revert to any of these 20 steps.

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**Note:** History is reset when you close the file.

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1. Click the **History** icon in the Panels area (see Figure 16).



Figure 16. Locating History in Photoshop panels.

2. Your image History expands.
3. Click any step in the list to revert your image to that state (see Figure 17).

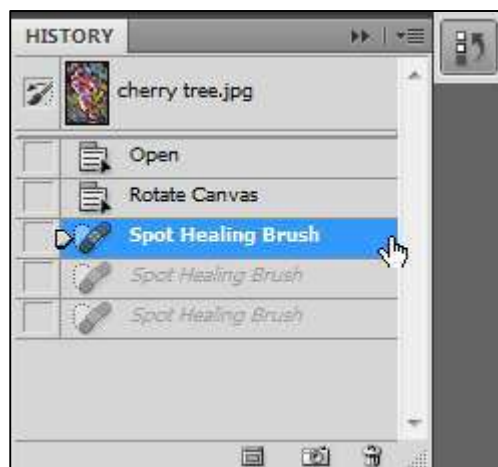


Figure 17. Reverting to a previous step in History.

## Saving Files

The following sections explain how to save your Photoshop file and image files for print or web.

### Saving your Photoshop File (PSD)

When working with an image in Photoshop, always save your work in Photoshop's native format, the PSD file format. The PSD file keeps all layers intact so you can edit your work later.

1. Click **File** in the menu bar.
2. Click **Save As**.
3. The *Save As* dialog box appears (see Figure 20).
4. Choose the location where you would like to save your file.
5. Name your file.
6. Click the **Save** button.

### Saving your File for Print

Print files should be saved at a high resolution. The recommended resolution is 300 ppi (pixels per inch). While a lower-resolution photo may look crisp on-screen, it will appear pixelated when printed.

First, verify that your image file is at least 220 to 300 ppi:

1. Click the **Image** menu in the menu bar.
2. Click **Image Size**.
3. Verify that the resolution is between **220 – 300 pixels/inch** (see Figure 18).

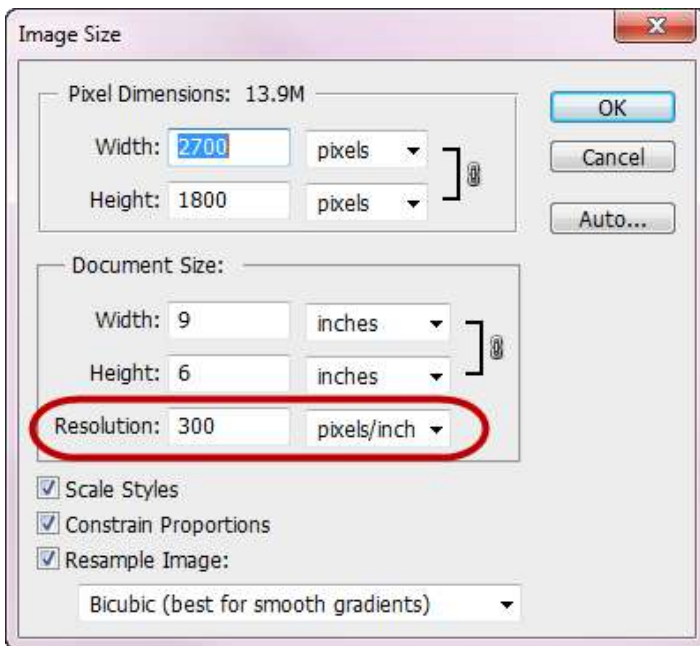


Figure 18. Image resolution.

4. Click the **OK** button.

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**Note:** For resolution less than 220 ppi, your file may not be suitable for print. See Adobe's web page [Photoshop / Image size and resolution](#) for information. You may be able to increase resolution while decreasing size, as long as you maintain pixel dimensions equal to or smaller than the original.

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After verifying your resolution, save a copy of the image:

5. Click the **File** menu.
6. Click **Save As**.
7. Choose the desired image file format in the **Format** dropdown, such as JPG, PNG, or BMP.
8. Choose the location where you would like to save your file.
9. Name your file.
10. Click the **Save** button.

## Saving your File for Web

When saving files for the web or email, the output resolution should be 72 ppi. Using the *Save for Web & Devices* function automatically exports your image at 72 ppi.

1. Click **File** in the menu bar.
2. Click **Save for Web & Devices**.
3. The *Save for Web & Devices* dialog box appears (see Figure 19).

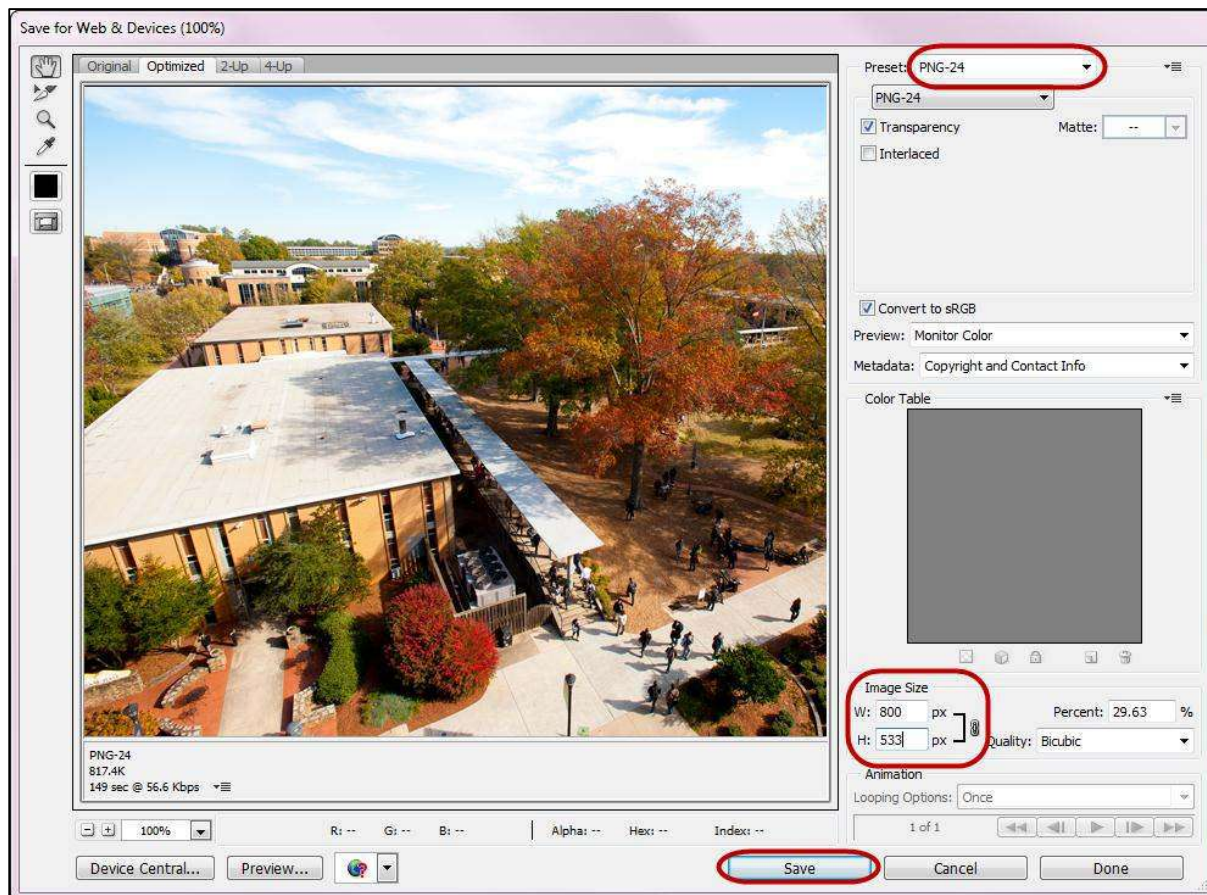


Figure 19. Save for Web & Devices.

4. Choose a **Preset** in the Preset dropdown, such as **PNG-24**.

5. Enter the desired **Image Size** in pixels.

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**Note:** Enter either Width (W) or Height (H); the other measurement will automatically update.

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6. Click the **Save** button.

7. The *Save Optimized As* dialog box will appear.

8. Choose the location where you would like to save your file.

9. Name your file.

10. Click the **Save** button.

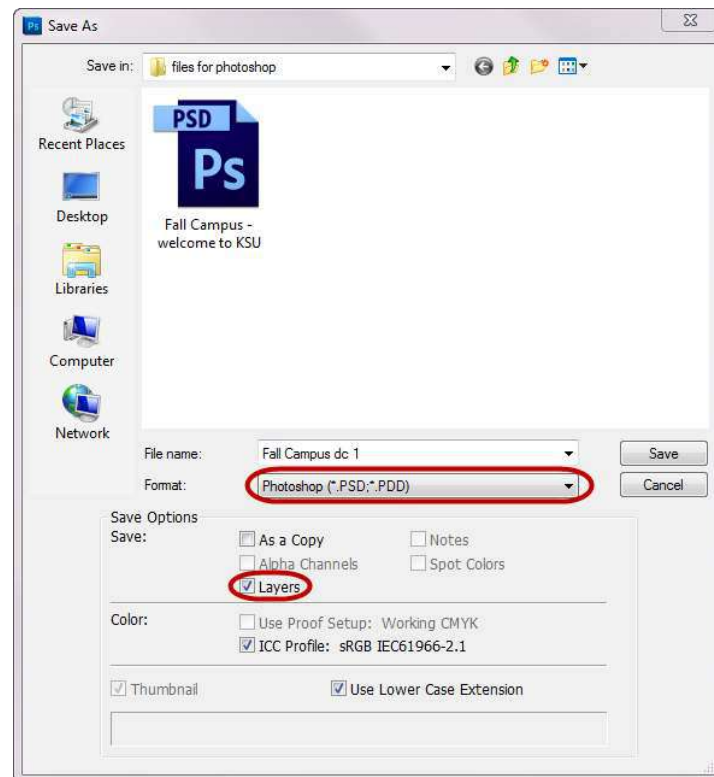


Figure 20. Save as Photoshop file, with layers.

11. In the *Format* dropdown, make sure **Photoshop (\*.PSD;\*.PDD)** is selected.

12. Under *Save Options*, make sure **Layers** is checked.

13. Click **Save**.

## Resources

Adobe publishes many video tutorials on their site, called **Adobe TV**.

Visit <http://tv.adobe.com/product/photoshop/> to access Photoshop tutorial content from Adobe.

Adobe also publishes video tutorials to the Photoshop YouTube channel, available at

<http://www.youtube.com/user/Photoshop>.

## Additional Support

For additional help or installation issues, please contact the KSU Service Desk (Faculty & Staff) or the KSU Student Help Desk (Students).

### KSU Service Desk for Faculty & Staff

- Phone: 470-578-6999
- Email: [service@kennesaw.edu](mailto:service@kennesaw.edu)
- Website: <http://uits.kennesaw.edu/faculty-staff/>

### KSU Student Help Desk

- Phone: 470-578-3555
- Email: [studenthelpdesk@kennesaw.edu](mailto:studenthelpdesk@kennesaw.edu)
- Website: <http://uits.kennesaw.edu/students/>