

## Image manipulation and Photographing with your cell phone

Using your phone.

Be sure you have your cellphone camera set for high quality photographs.

1. To print clearly, it is vital that images be adequate in size. DPI (dots per inch) refers to the number of dots per inch that a printer applies to the paper. The more dots of ink per inch, the higher the detail and therefore the higher the definition of the photo. As the DPI declines, there are fewer dots of ink per inch, so more space between each dot of ink. This translates to computer screens as well. For computers, the measurement is PPI (pixels per inch.) The concept is the same, the more detail the clearer the image will be on the screen.

2. You should be aware of these terms, which relate to what inks are used.

CMYK stands for Cyan, Magenta, Yellow, and Black. These are the four process colors used in full color printing. These are ink colors. FYI...Cyan is a shade of blue.

RGB stands for Red, Green, Blue. Images used on websites are RGB. RGB images are also used in newspaper printing.

Gray Scale-essentially black and white, with gradation.

Comment: Ideally, you should use CMYK for printing other than newspaper printing. Honestly, I have found that it makes little difference if I substitute an RGB image for a CMYK image, if that is all I have. If you have a choice, stick with CMYK. But, you probably don't need to lose any sleep over it if you notice your image is RGB, as long as the image is large enough.

3. For print, you need an image that is 300 DPI (dots of ink per inch.) For websites and the blog, 72 DPI is the standard. We commonly use 150 DPI on social media. If you can use larger files it is always better.

4. Dimensions. In addition to DPI, you need to be aware of the dimensions of your image. If you have an image that is 2 x 3 inches, at 300 DPI, you will degrade the image if you attempt to make it larger. When you expand a 2 x 3 image to 4 x 6 (doubling the size), the DPI measurement is reduced by half. It will become a 150 DPI image. This might create an unclear/blurry image upon printing. So, you want to be sure to have a larger image, at 300DPI.

5. Once you lower the DPI, you cannot recreate what was erased. Once you lessen the resolution, you cannot bring back the clarity that was diminished. So use "SAVE AS" to make a copy, rather than SAVING to your original file.

6. Resizing, cropping, and proportions. You will usually have to resize and crop images. Example: You have a 5x7 photograph, but the space you have to fill is only 4x6. You will have to resize to 4.29 x 6, then crop .29 inches from the image. If you simply resize the

image, not paying attention to proportions, the image will be distorted, and that is not appropriate.

c. In your design program, it is best to use image boxes that match the size of your image. It is cleaner, and as your layers add up, it makes it easier to manipulate objects on your page.

d. It is common for an image to appear darker when it is printed, as compared to how the original image looks on your screen. If you have an image that is dark, you will want to adjust it in Photoshop by bumping up the brightness a few points. I sometimes bring the contrast down a few points too.

### III. Color

a. You need to be aware of how colors interact with each other, especially when text is involved. Some combinations make text difficult to read.

b. Value (light intensity) Hue and Saturation.

### IV. Software

It is best to take advantage of the features offered by your software.

a. Cascading Style Sheets (CSS)--enables the separation of document content from document presentation, including elements such as the layout, colors, and fonts. Great for when you are working on a book, catalog, or brochure. Good for anyplace you have chapter headers or similar section breaks with headers. CSS enables global changes to your document. You might consider using them for your tags.

b. Spacing. Take advantage of the space settings (leading) in the program you are using, InDesign, for example. Take advantage of these settings within a text box, rather than creating many individual text boxes. Because, you might drive yourself crazy moving a bunch of little boxes around. It is easier to have fewer text boxes.

c. It may seem counterintuitive, but it is not always best to have the newest version of a software package. You have to think of the clients and vendors you will be interacting with. Do they have the newest version?

d. You have to be sure that your audience can use what you have created for them. You may be inclined to have a lot of video and flash components, a lot of bells and whistles. But you have to keep in mind that not all of your audience members will have access to high speed internet. Their hardware might be outdated, too. You could have two versions of your site, or simply keep your site simple.

e. Many small organizations now use a blog as their primary web presence, because they are so easy to maintain. WordPress is a good blog provider. If you have limited time, you may go with a blog.

### V. Keep your audience in mind.

a. In addition to the technological constraints, you should keep in mind what aesthetics your audience will like. If you are dealing with an aging audience, you don't want to go with a point size that is too small. You, personally, might like a design that you consider cutting edge, but a conservative audience might not appreciate it.

b. If you are asking people to print materials, you will have to keep your sizes pretty standard. Keep in mind some may not have color printers.

Hanging a Gallery exhibit

<http://creativitypro.com/how-to-hang-an-art-exhibition>

<http://stellersgallery.com/blog/archives/hanging-art-tips#.UxfTeeddWxE>

Lynda video on Matting, Framing, and Hanging Your Photographs

<http://www.lynda.com/Photography-Cameras-Gear-tutorials/Matting-Framing-Hanging-Your-Photographs/100583-2.html>

Designing a Public Space (at the Cleveland Museum of Art)

<http://www.lynda.com/Web-Documentaries-tutorials/Designing-public-space-Gallery-One-Cleveland-Museum-Art/147426/160920-4.html>

Responsive Typography Techniques

<http://www.lynda.com/CSS-tutorials/Responsive-Typography-Techniques/133331-2.html?srchtrk=index:1%0Alinktypeid:2%0Aq:art%2Bgallery%0Apage:1%0As:relevance%0Aasa:true%0Aproducttypeid:2>

Font Management Essential Training

<http://www.lynda.com/Design-Typography-tutorials/Font-Management-Essential-Training/144769-2.html?srchtrk=index:1%0Alinktypeid:2%0Aq:art%2Bgallery%0Apage:1%0As:relevance%0Aasa:true%0Aproducttypeid:2>

Creating a Responsive Web Design

<http://www.lynda.com/CSS-tutorials/Creating-Responsive-Web-Design/110716-2.html?srchtrk=index:1%0Alinktypeid:2%0Aq:art%2Bgallery%0Apage:1%0As:relevance%0Aasa:true%0Aproducttypeid:2>

In Design CS6 Essential Training

<http://www.lynda.com/InDesign-tutorials/InDesign-CS6-Essential-Training/96305-2.html>