

1) THE IMAGE FILE

Consider how the larger print size might affect the viewer's interpretation of the image itself. If your image is out of focus, blurred, or has excessive noise, then you may need to select a different one.

a) FILE SIZE

Plan to output an image that measures about 4800 pixels on the long end (or 2500 pixels at the absolute minimum).

At 200 ppi the file size of a 16"x 24" image equals 44 MEGABYTES.

b) SHARPNESS: Review your file closely at 100% enlargement BEFORE you setup the image for printing. Generally, a correctly focused image, shot with a high quality lens, and without camera shake, will lend itself to a higher degree of enlargement. ZOOM IN to 100% to view image detail. If you have edited the image, review the file for flaws at 100% enlargement. Use the healing brushes to edit edges of selections and flaws.

Ultimately, you will want to apply the Unsharp Mask filter, but avoid adding noise. Consult with your instructor regarding appropriate settings for this filter.

c) COLOR SPACE: Use the Adobe RGB color space to obtain a broad range of colors, to facilitate the production of colors closer to those seen on the monitor.

To set your color space in Photoshop, select Edit/Color Settings.

Under Working Spaces, select Adobe RGB (1998) for the RGB color space

You can also assign or convert to profile from this pull-down menu.

The Epson Ultrachrome printer is an RGB device—not CMYK.

d) HISTOGRAM: Does the histogram have:

- gaps or either end (which often results in a darker or lighter print, in comparison to the screen image)?
- gaps and spikes within the image curve itself (indicating posterization)?
- spikes on either end (extremes of white or black)? or
- an indication that there is a limited amount of data available for output (limited data visible on histogram)?

Remember that while the image you view on the monitor may appear correct, the computer reads only the available data. Your approval strip will provide visual confirmation. You can also use soft proofing methods in Photoshop if you have the appropriate ICC file for your printer and paper type.

f) FILE TYPE: Submit a **flattened** 8bit or 16 bit RGB TIF or PSD file. **No JPGs!**

Some consumer service bureaus prefer a jpeg file; consult with your service provider.

2) PREPARING THE FILE FOR OUTPUT: RESOLUTION

Resolution refers to the ability of photographic film to hold detail. This concept applies to digital files, relating to the density of the image data or **pixels per inch, ppi**.

2) PREPARING THE FILE FOR OUTPUT: RESOLUTION

The preferred resolution of an image is context dependent.

Conventional print resolution is 200 ppi.

A file output to a monitor is displayed at 72ppi.

An 8" x 10" print should be output to 300 ppi.

Files output for offset printing, using four-color reproduction, such as brochures and printed exhibition announcement cards, are set to a resolution of 300 ppi or higher.

A mural, viewed from a distance, does not require high resolution in comparison to a small 8" x 10" print, which will be viewed closely.

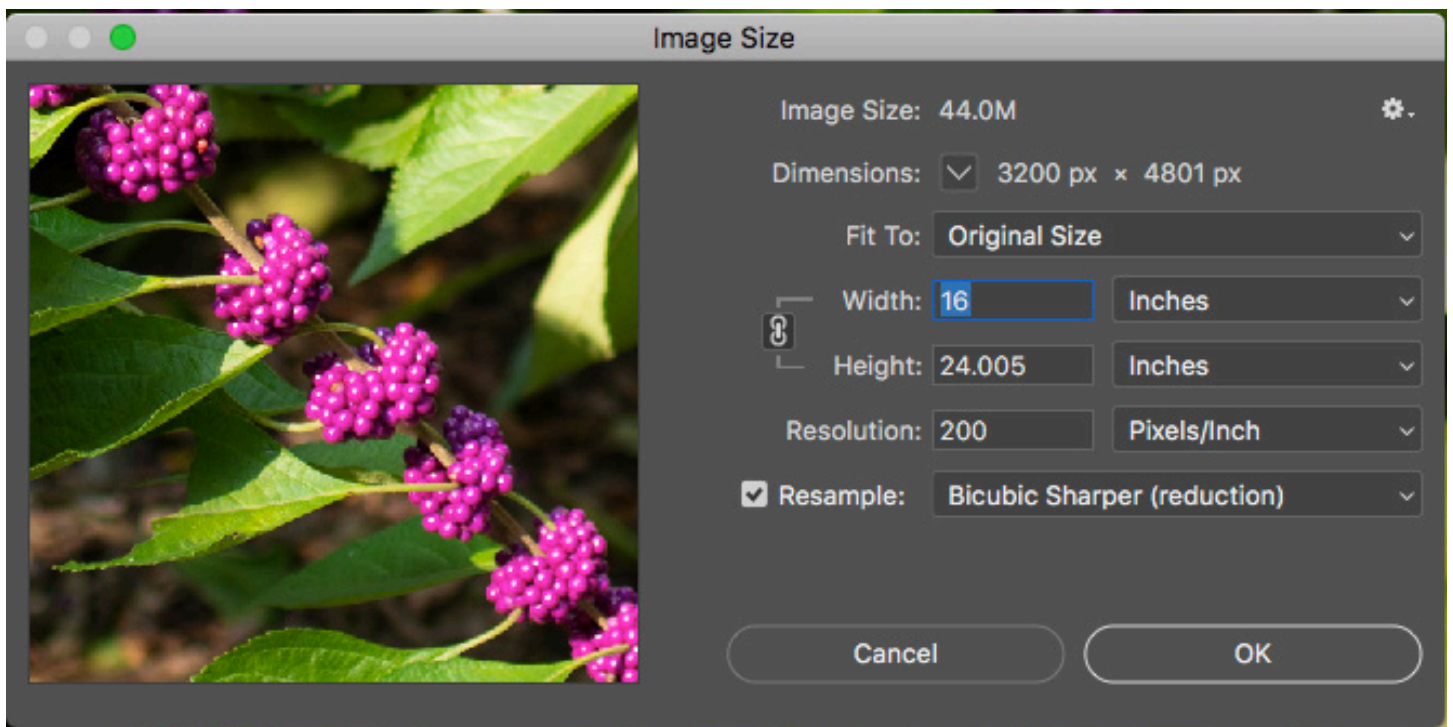
Plan to output an image that measures about 4800 pixels on the long end (or 2500 pixels at the minimum).

At 200 ppi the file size of a 16"x 24" image equals 44 MEGABYTES.

This vertical image file is 3200 pixels in height and 4800 pixels wide and totals 44MB at 8 bit and 98MB at 16 bit.

Example: In the case of this 44 MB 8 bit file, an image measuring 3200 x 4800 pixels (with the proportions of 2 : 3) can be printed at:

16 x 24 inches at 200 ppi



3) PRINT SIZE or DOCUMENT SIZE: 16 x 24 inches

If you observe the proportions of the frame of a DSLR digital camera or 35mm film negative the ratio will be **2:3, to produce a print size of 16 x 24 inches**

If your image file has different proportions from a standard DSLR, then **set the long side of the image to 24 inches and adjust accordingly.**

You will set the resolution of your image file to **200 ppi** (or at the absolute minimum of 125 ppi) depending upon the highest resolution of your camera or scanner or flattened, edited file.

An image print size of 16" x 24" with a resolution of 200 ppi will have a file size of 44 megabytes at 8bit. A 16 bit image would result in a file size of 88 MB.

4) PREPARE YOUR FILE:

To prepare your image file, open your file in Photoshop and select IMAGE : IMAGE SIZE.

Be sure that CONSTRAIN is LEFT ON in the Image Size dialogue box!

You do not want to change the image proportions.

Leave RESAMPLING UNCHECKED or OFF

You do not want use the software to upsample or downsample the file data, which is called interpolation. Do not add or subtract pixels.

Although upsampling can be explored to some degree (up to 30% enlargement), the image will ultimately become soft at high levels of upsampling, which may introduce artifacts. View the image on the monitor inside Photoshop; zoom to 100% enlargement.

Enter 24 inches for the long size of the image in the IMAGE SIZE dialogue box.

5) APPROVAL STRIP: 3 x 24 inches

Once your file is ready for output, create a test strip or "approval strip." This test will provide information regarding color balance, contrast, brightness, and overall image quality BEFORE a full size print is generated. You may submit one or two approval strips, but you will only have one opportunity to create a large print.

To create the approval strip, save a new copy of your image with the title: LASTNAME_FIRSTNAME_APPROVAL

Select the CROP TOOL in Photoshop. Create a new Crop Preset.

In the options for the crop tool, type in 24" for height and 3" for width—if your image is in a vertical orientation. Or 24" for width and 3" for height--if your image is horizontal.

[Your image MUST already be 24 inches on the long side, which can be verified by selecting the Image/Image Size dialogue box. If not, then return to #4 above.]

Drag the crop tool so that the selected strip stretches across the long end of the image. Pull the selection box to the edges of the image, and over an ideal area for your test strip.

5) APPROVAL STRIP:



This area might have both dark and light values, and/or specific colors that you wish to prioritize in your final print. Press RETURN to accept or CMD PERIOD to cancel.

**Save the test as a PSD or TIF file with the filename:
LASTNAME_FIRSTNAME_APPROVAL.**

BE SURE TO INCLUDE YOUR NAME in the filename.

Submit your files to the UTD Box folder for the class assignment.

Pick up approval strips from the Clean Print Preparation area, 3.902.

6) REVIEWING THE APPROVAL STRIP

View your approval strip under daylight or daylight-balanced fluorescent lighting.

Note problems with color balance, contrast, or brightness. USE ADJUSTMENT LAYERS to make changes to your file, if required, and save that edited version. Resubmit your approval strip, if needed.

7) PRINTING THE FINAL 16" x 24" COPY

If changes were required, you can drag and drop the adjustment layers from your unflattened approval strip file to your original 16" x 24" image file. Flatten the layers of your final print file before submitting.

The final print file should be 24" in height (or on the long end) and approximately 16" in width.

SAVE THE FILE: **LASTNAME_FIRSTNAME_FINAL.psd or .tif**

Submit file via the class folder on UTD BOX. Pick up final prints from the Clean Print Preparation area, 3.902. **Generally, files can be output within one week**, and sometimes within a few days. The volume of printing at the end of the semester impacts the turnaround time.

Other Options:

APPROVAL STRIP: Select several areas of your image and combine them to create your 3" x 24" approval strip, so you can test various colors and values.

SOFTPROOFING:

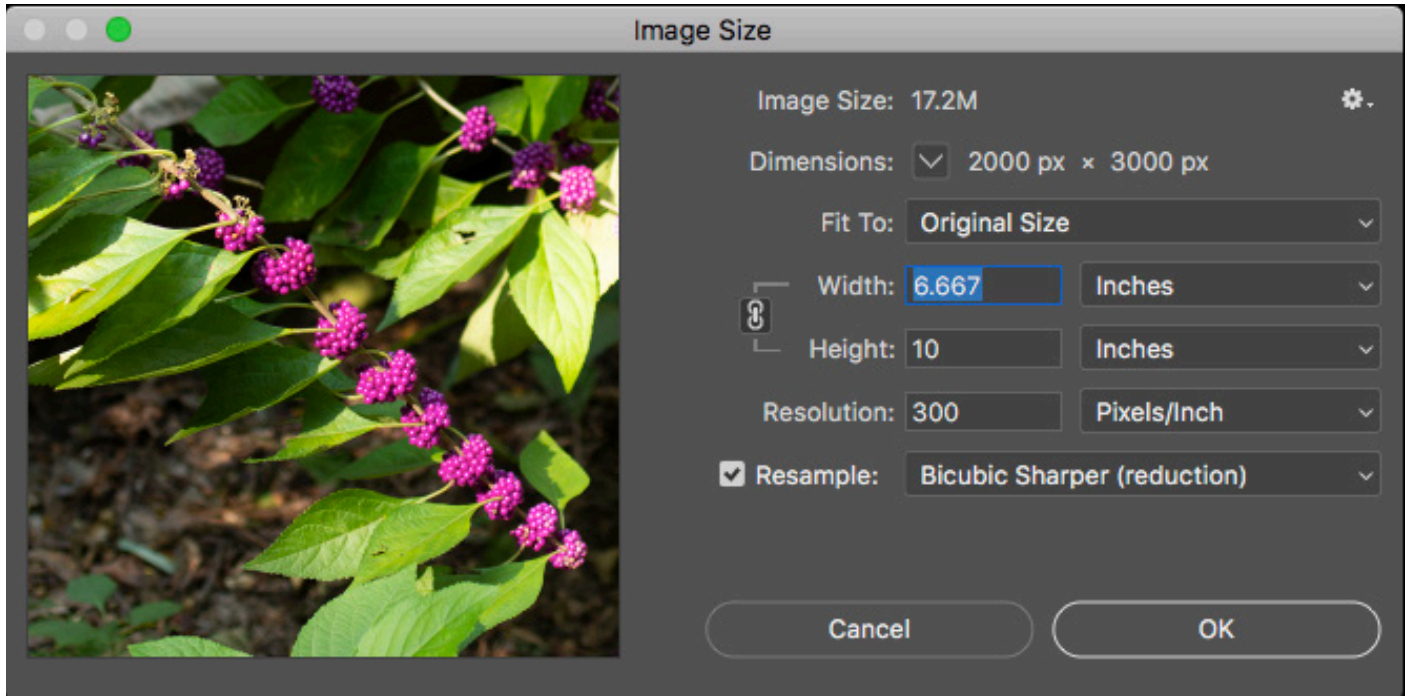
Color proof, or soft proof, on the monitor by using ICC profiles. The paper currently being used with the Epson 7900 Ultrachrome printer is the Epson Premium Glossy Paper.

Download Epson's printer profiles for the 7900/9900 and load them into your System Library, under ColorSync/Profiles.

Select View: Proof Setup: Custom and select the Epson profile from the Device to Simulate menu. Then select **View: Proof Colors**.

8) OUTPUT : 8 x 10 inch image file onto 8.5 x 11 inch digital print paper

Open the **Image / Image Size** dialogue box in Photoshop, to resize your image. Follow the instructions for resizing the larger 16 x 24 inch print, but insert 10 inches, instead of 24 inches, for the long end of the image. Review your resolution, which should be 200-300 ppi or higher.



Place your image onto a larger canvas by selecting **Image / Canvas Size**. Enter 8.5 and 11 inches into the width or height as they correspond to your vertical or horizontal image. Also, select Canvas extension color (or background) as in White or Black.

