

DIGITAL IMAGING WORKFLOW USED BY THE COLUMBIA COLLEGE CHICAGO PHOTOGRAPHY DEPARTMENT

As agreed upon by Digital Imaging II instructors: 20080627
This workflow is our variant, based on our collective experiences,
on that recommended by Ben Wilmore in the required DGII text.

The following is a digital workflow for editing photographic images in Photoshop. The goal is to allow you to create a MASTER IMAGE FILE of the highest quality from which you may strike any type of derivative work for any output you might desire. These are our current recommendations. This workflow will change as technology changes and our knowledge and experience continue to deepen. Some steps may not be necessary for the particular image you are working on. In that case, skip a step and move to the next. Following these steps should, in most circumstances, provide you with an optimum Master File and do so in an efficient, logical, repeatable manner.

1. IMAGE CAPTURE

A) Capture an image with a digital camera using the Camera Raw file format. Convert the Raw file to a 16 bit psd or tiff file through the Adobe Camera Raw Converter or similar application (i.e., Lightroom) to be imported into Photoshop.

OR

B) Scan your film negative or transparency in 16-bit RGB color at the appropriate file size in megabytes determined by your desired output (physical size plus optimum resolution).

2. ROTATE, CROP, ADJUST PERSPECTIVE AND CORRECT LENS DISTORTION, AS NECESSARY

3. INPUT SHARPEN

Regain the quality that has been lost during the image capture stage by input sharpening, as necessary. Possible methods and resources: Matt Siber's ([advanced_sharpening_screen.pdf](#)) or Jeff Schewe's ([schewe_sharpening.pdf](#)). Color blending mode: luminosity.

4. GLOBAL COLOR AND TONAL CORRECTIONS

Set black and white points and overall brightness using one of the following methods:

A) Toe in the black and white point sliders on the red, green and blue channels in the Levels adjustment layer. Then adjust the midtone slider for overall brightness. Color blending mode: normal.

OR

B) Set white and black points using Threshold and Levels. Then adjust the midtone slider for overall brightness. Color blending mode: normal

Set midtone contrast

Use Curves adjustment layer. Color blending mode: luminosity

Set color balance

Use Curves adjustment layer. Color blending mode: color

Set hue and saturation

Use Hue & Saturation adjustment layer. Color blending mode: saturation

Make sure your global corrections are set before you begin working on any local corrections. For efficient, logical layer management, we recommend that these global color and tonal corrections be placed inside a

layer set folder entitled GLOBAL CORRECTIONS.

5. SPOTTING AND RETOUCHING

On a blank layer placed between the background layer and the Global Corrections folder, remove dust, scratches and other imperfections using Spot Healing Brush, Healing Brush, or Clone stamp tools. To use the Patch tool make a selection and place on a separate layer. If the image was captured with a digital camera, in most cases dust will not need to be removed (unless lenses were changed in the field). Make retouching and creative alterations and manipulations including local sharpening or blurring, as necessary.

6. (OPTIONAL) CONVERT TO BLACK AND WHITE

If converting from color to black and white, do it now using your preferred method (i.e., Channel mixer, Hue & Saturation, etc.).

7. LOCAL COLOR AND TONAL CORRECTIONS

Make corrections to specific areas of your image using a combination of selections, layer masks, adjustment layers, and 50% auto dodge layer. For efficient and logical layer management, we recommend that spotting, retouching and local color and tonal corrections be placed inside a layer set folder entitled LOCAL CORRECTIONS.

8. (OPTIONAL) CONVERT TO EIGHT BIT

If you are working with large megabyte file sizes that make corrections time intensive, you might consider converting your 16-bit image to an 8-bit image at this point. Flatten image and convert to a bit depth of 8 bits per channel. This will reduce file size for ease of operation in Photoshop and save space on your hard drive. You may also choose to save a layered version of this file separately.

9. SAVE LAYERED VERSION

Save a copy of layered version of your image (to preserve ability to make future changes, as necessary).

10. (OPTION) FOR BLACK AND WHITE PRINTING

If printing using a spectrum of black and grey inks, convert your image to grayscale (if still in RGB) or in order to print duotone/tritone/quadtone/gradient mapped images.

11. OUTPUT SHARPEN

A) For images of "normal" megabyte size, keep layers intact and sharpen using the Unsharp Mask filter in Photoshop. Size the file to final physical size and final resolution for that size as well as for type of output and media used. Then use Schewe method #3 (see sharpening_schewe.pdf), or your preferred method. View monitor image at 50% screen zoom to evaluate how it will appear on paper.

OR

B) For images of excessively large megabyte size or for those images using many retouching layers, flatten the layered image. Size the file to final physical size and final resolution for that size as well as for type of output and media used. Then use Schewe method #3 (see sharpening_schewe.pdf), or your preferred method. View monitor image at 50% screen zoom to evaluate how it will appear on paper.

Output sharpening can increase the appearance of dust and other artifacts, so recheck image prior to printing.

12. PRINT

View the print under the lighting circumstances in which it will be shown (Viewing Room, natural light, etc.). If adjustments need to be made, make them using the appropriate adjustment layer(s) (most often, Curves and/or Hue and Saturation) placed at the top of the layer stack.

13. ARCHIVE

Save your scans and your master files on at least one *external* harddrive (*not* on CD's or DVD's because of data instability).