

DESN 350 Digital Imaging and Photography Week 4 Spring 2017

Photography + Photoshop Assignments

1. Create an HDR image. Use Photoshop's HDR tools to create a combined image incorporating very dark and very light details. The subject should be beyond the dynamic range of any one image. *Example #1*, a shot of the interior of your house in the late evening with lights on in the room. The picture **also** shows a window exposing an outside scene that is much darker. *Example #2*, set the camera up outside to take an image of the front of your house or apartment and through the window you can see the exterior details, plus the interior lit by bright lights inside the house. A successful picture will have **no clipping** either in the bright or dark areas.

How This Is Done

Take three pictures of exactly the same scene at exactly the same angle, at close to the same time, one exposed about average, one overexposed to keep the darkest details from clipping, and one underexposed to keep the brightest details from clipping.

Bracketing would do this for you, with +/- 1 to 2 stops. Or just take three shots, two with exposure compensation settings set at +2 and -2 each. A tripod is very important, as any slight change in the direction of the camera between shots will degrade the final picture.

Finally use Photoshop's HDR tool (File > Automation > Merge to HDR) to combine them and to adjust the contrast appropriately.

Please turn in this assignment as a collage that includes small versions of the original images.

Photoshop Text Tutorial – Black and White

2. Open the image black_and_white_tree.tif (Figure 19.1 tree and blue sky) and follow the tutorial pp. 485-488. The explanation is for Lightroom. Alternately, you will find essentially the same tools in Photoshop's **Image > Adjustments > Black and White** to create an effective grayscale image as in the tutorial.

Photoshop Text Tutorial – Noise

3. Open the image Ron Miles.jpg, figure 20.23 on page 519. You can use Lightroom, or Photoshop > Filters > Noise > Reduce Noise. The controls are very similar.

Braukmann, 7/16/17

Photoshop Linked Tutorial - Sharpening

4. Open the image Portrait.tif (Figure 22.9 closeup of woman) and follow the tutorial *Selective Sharpening.pdf* to sharpen the eyes and the edges of the face without emphasizing the wrinkles. A link to the whole tutorial ("*tutorial on selective sharpening*") is provided on the class website.

Study Questions: Sharpening Ch19 pp 553-557- Read the text for understanding.

When you apply the "unsharpen mask" filter, what happens? *A: Creates the illusion of sharpness as it gives edges more contrast.*

What is the "key" to good Unsharp Masking?

A: Don't do too much!

Why should you always sharpen at 100% pixel view? *A: If zoomed out, it is sharper looking than it really is.*

What type of images can generally stand more sharpening? *A: Not so much foliage or lots of small detail. Not so much for skin. Better for simple shapes with well-defined edges.*

How do you use layers and "paint" to control where sharpening occurs in your image?

A: Use a layer mask and paint black where you don't want to sharpen.

How important is it to sharpen faces in images?

*A: Often it is **not** advisable.*

Study Questions about Noise Ch 20, p518

In what situations is a digital camera liable to produce "noise-y" images? *At high ISOs. Also in shadow areas and bright skies.*

What does luminance noise look like?

What does chrominance noise look like?

Which RGB channel usually has the most noise?

A: Blue

Also:

How does the PS Quick Selection tool work?

What are halftone dots, and how does Levels help us fix the problems they cause?

Products and Composite Images

Photography Assignments

5a and b. You are given two products. For each product, submit one picture taken with a tent, and a second picture created with seamless background and two softbox lights. Photograph each of the products at a slight angle, so that you can see the height, width, and depth. All details on each product must be in focus. Highlights should not be clipped. Label details should not be washed out. Colors should be accurate.

6a and b. Create advertisements composites for both products by placing the product image over one of the *contrasting* backgrounds supplied on drbraukmann.com. Add appropriate text to make a simple ad, but not obscuring the product. You will not be graded on the design or the typography, but simply on the cleanness of the composite.

7a and b. Take a picture of each of the two small items using the small tent in CEB 125. These pictures should be nearly macro, filling the frame. Show the items at a slight angle so as to show height width and depth.

Photoshop Assignments

8. Cut out the **motocross** bike and put it into one of **your own color images** *that you have turned in this quarter, or into one of the assignment images you have worked on*. If you use the magic wand tool for selection, the tolerance setting will have to be low, perhaps 7.

Then the challenge is to make the motorcycle look natural in its new image, so an image with similar lighting would be helpful. (You always have at least two options on every image because you can flip either the background image or the motorcycle side-to-side. To complete the illusion, adjust the **size** (Image Size), **color** (Color Balance), **brightness** (Curves or Brightness/Contrast), **saturation** (Hue, Balance and Saturation), possibly **film grain** (Filters > Artistic or Texture) and possibly add a **shadow** (We will do one in class). The motorcycle should be no smaller than 1" tall on your final 900-1200 px image. Submit a jpg.

9. Complete the image of the kitten on the desk. We will do a great deal of this in class.

10. Create a composite image placing the male **figure** into the **background** supplied. We will begin this assignment in class. It needs to be as perfect as possible. Watermark and turn in a jpg.

Braukmann, 7/16/17

Study Questions on Product Photography

What are the three important factors in product photography?

What is the most important factor in product photography?

What are three factors in choosing the product setup?

How are tents and softboxes used? What do they allow you to do that you cannot do with ordinary photography lights?

How might a honeycomb help your image?

What is a *sweep* background?

What are the general guidelines for softbox placement? What is our starting distance between the softbox and the product being photographed?

Why might you want to try two different size softboxes on the same image?

Selected questions from Ch 12 Special Shooting: Black and White Exposure

What characteristic of a scene makes it a good candidate for black and white photo?

Is it better to use your camera's black and white option, or shoot in color and change it to black and white later in Photoshop?

Study Questions on Compositing

What are the characteristics of photographs and light that must be matched when trying to composite images? *A: size, resolution, graininess, DOF, brightness/exposure, contrast, color of light (color balance), direction of light, perspective, location and hardness or softness of shadows.*

Where do you find the Quick Selection tool?

What are the effects applied to composite image layer when it is supposed to appear as a reflection?

How does Image > Adjustments > Match Color help composite images?

How does Edit > Free Transform help composite images?

What are the key steps to create a cast Shadow in PS?

What and where is the film-grain tool in PS?